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## UNITED STATES MARINE CORPS

MARINE FORCES RESERVE  
4400 DAUPHINE STREET  
NEW ORLEANS, LOUISIANA 70416-5400

ForO P4790.3A

MMO

08 MAY 2002

### FORCE ORDER P4790.3A

From: Commander, Marine Forces Reserve

To: Distribution List

Subj: STANDARD OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT  
(SHORT TITLE: SOP FOR MAINTENANCE MANAGEMENT)

Ref: (a) MCO P4790.2\_\_

Encl: (1) LOCATOR SHEET

1. Purpose. To establish policy and procedures for Marine Corps ground equipment maintenance of the Selected Marine Corps Reserves.

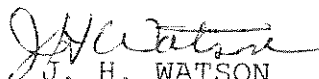
2. Cancellation. ForO P4790.3.

3. Summary of Revision. This revision contains a substantial number of changes and should be completely reviewed.

4. Recommendations. Recommendations concerning the contents pertaining to the Standing Operating Procedures (SOP) for the Marine Corps Integrated Maintenance Management System (MIMMS) are invited. Submit recommendations via the appropriate chain of command to the Commander, Marine Forces Reserve (AC/S, G-4) for evaluation.

5. Reserve Applicability. This Manual is applicable to the Marine Corps Reserve.

6. Certification. Reviewed and approved this date.

  
J. H. WATSON  
Chief of Staff

DISTRIBUTION: D

ForO 4790.3A  
08 MAY 2002

LOCATOR SHEET

Subj: STANDARD OPERATING PROCEDURES FOR MAINTENANCE  
MANAGEMENT

Location: \_\_\_\_\_  
(Indicate location(s) of copy(ies) of this Manual.)

ENCLOSURE (1)

# SOP FOR MAINTENANCE MANAGEMENT

## RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Person Incorporating Change

# SOP FOR MAINTENANCE MANAGEMENT

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(MARES)

# SOP FOR MAINTENANCE MANAGEMENT

## CHAPTER 1

### GENERAL INFORMATION

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# SOP FOR MAINTENANCE MANAGEMENT

## CHAPTER 1

### GENERAL INFORMATION

1000. INTRODUCTION. Maintenance is a readiness determinant. One of Marine Forces Reserve's (MARFORRES) primary goals is to maintain maximum combat readiness at all times. This goal is achieved through a balanced program that adequately trains personnel and maintains materiel for the overall readiness of an organization. Command interest in maintenance and maintenance management is perhaps the single most important factor for a successful maintenance program. The purpose of this SOP is to establish procedures that will properly and efficiently use personnel, facilities, support equipment, and repair parts to ensure a high level of equipment readiness within MARFORRES.

#### 1. Objectives

a. To establish command and staff relationships in the conduct of MARFORRES equipment maintenance program and to identify relationships between Marine Corps Integrated Maintenance Management System (MIMMS) and other related Marine Corps programs.

b. To provide policies and procedures aimed at assisting commanders and maintenance personnel in planning, controlling, and administering MARFORRES maintenance management programs.

c. To ensure equipment maintenance management requirements are identified and the responsibilities for their accomplishment are assigned to the appropriate command level and staff agency.

d. To provide detailed guidance for the management of equipment maintenance at all levels of command.

2. Procedures herein are governed by MCO P4790.2\_ (MIMMS Field Procedures Manual).

#### 1001. COMMAND RESPONSIBILITIES

1. The management of assigned equipment is an inherent command responsibility. MCO P4790.2\_ outlines a commanding officer's responsibilities for the maintenance management of all equipment assigned to his/her accounts.

a. Unit commanders will establish and/or conduct equipment maintenance programs per the procedures set forth in this manual.

b. Unit commanders will be prepared at all times to advise their Major Subordinate Command (MSC) and MARFORRES (G-4) on the status of materiel readiness and maintenance within their respective units.

c. Unit commanders will report through normal channels to the MARFORRES (G-4) on all maintenance related difficulties that cannot be resolved through normal channels and procedures.

d. Unit commanders will assign a maintenance management officer (MMO) in writing when their command is authorized 2d echelon or higher maintenance in more than one commodity area. This responsibility may be assigned as an additional duty for an Officer or a Staff Noncommissioned Officer/senior maintenance Marine when a full-time Officer/SNCO assignment is not required.

2. All MARFORRES units will perform only the authorized maintenance actions as prescribed in their respective T/O logistics capabilities statement. Repairs will be performed at the lowest authorized echelon of maintenance (EOM) consistent with the nature of the repair, authorized repair parts, tools, equipment, time available, capabilities of personnel, tactical situations, or local conditions. Equipment requiring repairs beyond the scope or capability of one echelon will be evacuated to the next higher echelon. When practical, units may request support from Increased Echelons of Maintenance (IEMs), Inter-Service Support Agreements (ISSAs), and Memorandum of Understanding (MOUs) through the Commander, MARFORRES (G-4). Units can also request contact teams from 4th Maintenance Battalion.

## 1002. STAFF RESPONSIBILITIES

1. General. The Commander's staff is primarily composed of the G-1/S-1, G-2/S-2, G-3/S-3, G-4/S-4, G-6/S-6, and the special staff composed of the adjutant, MMO, supply officer and maintenance officer where assigned. All staff officers contribute to the overall effectiveness of the maintenance management program. In addition to standard staff action requirements, staff officers must establish appropriate maintenance management relationships between the Commander, MMO, and other staff and supervisory personnel. The AC/S, G-4 MARFORRES has staff cognizance for all maintenance management within MARFORRES.

2. G-1/S-1. The G-1/S-1 serves as the principal staff officer in all matters pertaining to personnel management. The adjutant has staff responsibilities for publication allowances, requisitioning of publications, maintenance of publications, publication listing, and the internal distribution control. Cognizant staff officers' recommendations for assignment of maintenance personnel will assist the S-1 in the effective use of personnel resources.
3. G-2/S-2. The G-2/S-2 serves as the principal staff officer on all matters pertaining to combat intelligence.
4. G-3/S-3. The G-3/S-3 serves as the principal staff officer on all matters pertaining to operations and training. The MMO in conjunction with commodity managers will coordinate with the G-3/S-3 to ensure required military occupational specialty (MOS) technical subject training is provided to all maintenance personnel. The MMO will determine maintenance management training requirements and make the appropriate recommendations to the G-3/S-3. Allocating time to conduct equipment maintenance training (to include maintenance stand downs) will be included in all training schedules.
5. G-4/S-4. The G-4/S-4 serves as the principal staff officer in all matters pertaining to logistics. This includes those matters directly related to materiel readiness, equipment maintenance, and management of equipment maintenance resources.
6. G-6/S-6. The G-6/S-6 serves as the principal staff officer in all matters pertaining to communications and calibration. This will encompass all matters for computer equipment requirements as well as maintenance on all computer hardware and software. This support includes information package (InfoPac) systems installation and training requests.
7. MMO. The MMO serves as a special staff officer/SNCO under the staff cognizance of the G-4/S-4. The MMO is responsible for exercising staff supervision over all aspects of the unit's maintenance program. The MMO, in cooperation with commodity managers, assists the commander by coordinating the unit's maintenance resources. The MMO exercises principal staff cognizance over the maintenance management functional areas as listed in Chapter 1 of MCO P4790.2\_.
8. Maintenance Officer. In units authorized by T/O, the maintenance officer is considered a special staff officer. The maintenance officer oversees the performance of maintenance on



all equipment and maintenance operations. The maintenance officer's responsibilities include, but are not limited to, coordinating, planning, using, and disposing of maintenance resources.

9. Commodity Managers. Commodity managers are those Officers/SNCOs assigned duties as managers of special or technical commodity areas. Commodity managers work closely with the MMOs in developing maintenance programs.

10. Supply Officer. The supply officer serves as a special staff officer to the unit commander. The supply officer is responsible for supply support for the unit maintenance program. The MMO assists the supply officer in determining supply support requirements for maintenance operations under all operating conditions.

#### 1003. DESKTOP PROCEDURES AND TURNOVER FOLDERS

1. Commanders will ensure the development and use of desktop procedures and turnover folders by key maintenance management and maintenance personnel per MCO P4790.2\_.

2. Desktop procedures will contain a compilation of significant items or notes pertinent to everyday operations. The format in which information is provided is of particular importance. A lengthy format and manuscript style writing discourages reader use. Outlined below are the minimum requirements for desktop procedures:

- a. Title of billet.
- b. To whom the individual occupying the billet reports.
- c. The mission of the billet. (Brief billet responsibilities).
- d. Procedures for carrying out required duties.
- e. Telephone numbers of individuals to contact.
- f. Current references.
- g. Reports required.

3. Management control procedures compiled in turnover folders allow for ready reference to information vital to overall

operations. These controls establish the basic who, what, where, when, why, and how. At a minimum, turnover folders will contain statements concerning the following:

- a. Title of billet.
  - b. Whom the individual occupying the billet reports to and incumbent billets subordinate.
  - c. Mission of the billet (broad billet responsibilities).
  - d. Basic functions involved in accomplishing the billet mission.
  - e. Tasks and basic operations regularly performed in accomplishing specific functions.
  - f. List of orders, directives, and technical manuals deemed pertinent to the billet.
  - g. List of required reports (date of submission, etc.).
  - h. Internal and external relationships within the organizational chain of command, including unofficial liaison and coordinating instructions.
  - i. Contact list within or external to the command, phone numbers, and purpose served by the contact.
  - j. Miscellaneous information should be included:
    - (1) Administrative procedures.
    - (2) Operational procedures.
    - (3) Additional duties.
    - (4) Coordination between dual responsibilities.
    - (5) Limitations in responsibility of authority within specific duties or functions.
  - k. Past, pending, and anticipated projects will be itemized and kept current.
4. One effective way to establish workable turnover folders is to arrange information by functional area. Such an arrangement will greatly assist newly assigned personnel.

5. Turnover folders and desktop procedures will be reviewed semi-annually or upon turnover of personnel for accuracy and applicability. Desktop procedures and turnover folders will be maintained by the billets indicated below. The list is not all encompassing and some units may not possess all listed billets. Smaller units may have one individual performing several billets. It, therefore, may be more practical to have the turnover folder/desktop procedure address billets separately to enable the unit to provide the information to individuals assigned to one or more of the billets.

	<u>Desktop Procedures</u>	<u>Turnover Folder</u>
a. Maintenance Management Officer	O	M
b. Maintenance Management Chief	O	M
c. Commodity Manager	O	M
d. Maintenance Officer	O	M
e. Maintenance Chief	O	M
f. MIMMS Clerk	M	O
g. Calibration Control Clerk	M	O
h. Publication Clerk (Librarian)	M	O
i. Modification Control Clerk	M	O
j. Records Clerk	M	O
k. ERO Bin/Parts Clerk	M	O
l. Tool Room NCO	M	O
m. Technical Training NCO	M	O
n. Safety NCO	M	O

KEY: M = Mandatory O = Optional

6. MMOs will ensure those personnel assigned cognizance over maintenance management functional areas have established turnover folders and desktop procedures in each of their commodity areas.

1004. MAINTENANCE MANAGEMENT STANDARD OPERATING PROCEDURES

1. General. MCO P4790.2 establishes the requirements for MMSOPs within units. The order also states that when instructions published by higher headquarters (to include this manual) are sufficiently clear, completely applicable at unit level and sufficiently detailed, such instructions should be referenced in lieu of repeating the contents of the instruction. This directive may be used as the unit MMSOP by including the following statement in the Commander's Maintenance Policy Statement: "ForO P4790.3 will be utilized as this units MMSOP". This MMSOP will be supplemented by unit Maintenance Management Policy Notices (MMPN) when applicable.

2. Each unit is required to amplify its authorized echelons of maintenance for each commodity and identify each commodity's supporting activity. This policy will be included in the unit's MMSOP or it will be included in a MMPN if this manual is used as the unit's MMSOP. Figures 1-1 (pg 1-11) and 1-2 (pg 1-13) are examples of unit Maintenance Management Policy Notices. Unit's MMPN will be updated upon changes or annually, and a new checklist with current MMPNs issued. Figure 1-3 (pg 1-14) is an example of the MMPN semi-annual checklist.

1005. SAFETY

1. A conscientious effort must be made to recognize, eliminate, and warn against safety hazards encountered in maintenance areas. The overall safety program for each organization shall be under the cognizance of the MARFORRES Safety Officer located in the Base Operations Support (BOS) Office.

2. The unit's safety officer shall ensure that applicable instructions are given and complied with to affect a smooth flow of maintenance and maintenance production. Applicable safety publications will be referenced and posted to ensure all safety precautions are taken.

3. The current editions of NAVMC 2692 (Unit Level Safety Management) and MCO 5100.8 are publications in which safety precautions can be found. These directives should be utilized to develop procedures to locate and eliminate any hazards that may result from maintenance operations.

1006. RECOGNITION OF PERFORMANCE

1. Performance. Every Marine is responsible for evaluating the performance of his/her subordinates. Early recognition of either superior or substandard performance is a function of leadership in maintenance and maintenance management specialties as it is in any other occupational field.

2. Recognition. Commanders should establish procedures to recognize maintenance personnel for significant contributions to the mission of the unit. Treat the unit's maintenance mission the same as its operational mission. Maintenance personnel will have the opportunity to compete in all organizational recognition programs on an equal basis with personnel of other specialties.

3. Correction. Supervisors at all levels will take corrective action where evaluation indicates substandard performance. Disciplinary action, if required, is the punishment for negligence, indifference, and inadequate performance of assigned maintenance tasks.

## SOP FOR MAINTENANCE MANAGEMENT

### HEADING

4790

MMO

Date

From: Commanding Officer, (Unit)  
To: Distribution list

Subj: MAINTENANCE MANAGEMENT POLICY NOTICE (MMPN) 1/00,  
COMMANDER'S MAINTENANCE POLICY STATEMENT

Ref: (a) MCO P4790.2\_  
(b) ForO P4790.3A

1. Reference (a) requires that commanders publish Maintenance Management Standard Operating Procedures (MMSOP) when the unit is authorized to perform second echelon or higher maintenance for more than one commodity area. The reference also states that these commanders will publish MMSOPs except when maintenance procedures are adequately covered in the Major Subordinate Command (MSC) MMSOP. In such cases, the MSC MMSOP may be used in lieu of the unit MMSOP.

2. Reference (b) is the current SOP for maintenance management in MARFORRES. It is applicable to all units within MARFORRES and provides guidance in the functional areas of maintenance management. The requirement to restate these guidelines at the regiment, group, battalion, and squadron level are unnecessary and a time-consuming administrative burden.

3. In the spirit of reducing this burden on MARFORRES units, commanders need not publish a MMSOP if they choose to adopt and follow the guidelines set forth in reference (b) and applicable MARFORRES Maintenance Management Policy Notices. The commander should cancel the current unit MMSOP and issue a unit policy letter. Each regiment, group, battalion, and squadron commander will also publish amplifying guidance in the form of policy notices when special operational maintenance requirements or geographic constraints require detailed procedures. At a minimum, a unit MMPN covering the commander's maintenance policy to include authorized echelons of maintenance and a checklist of the unit MMPN in effect will be published as shown below.

COMMODITY	ECHELON	RESPONSIBILITY
MT	1ST	EQUIPMENT OWNER
MT	2d	MT OFFICER

Figure 1-1.--Sample format MMPN Commander's Maintenance Policy Statement.

## SOP FOR MAINTENANCE MANAGEMENT

COMM	1ST	EQUIPMENT OWNER
COMM	2d	S-6 OFFICER
ENGR	1ST	EQUIPMENT OWNER
ENGR	2d	ENGINEER OFFICER
ORDNANCE	1ST	EQUIPMENT OWNER
ORDNANCE	2d	ORDNANCE OFFICER

4. The MMO will ensure that references and the regiment, group, battalion, and squadron MMPNs are made available for maintenance and supply personnel requiring their use. This guidance does not preclude commanders from publishing a MMSOP if desired.

5. MARFORRES (G-4) is responsible for making any changes to reference (b). Changes will be issued to each MSC, who will then ensure distribution throughout their respective MSC.

6. Increased echelon of maintenance (IEM) must be approved by the MARFORRES (G-4) unless the IEM satisfies the criteria listed in MARADMIN 110/00 "Common Sense Approach to Maintenance", in which case the IEM may be approved by the unit's commanding officer.

7. All MMPNs will be filed in Turnover/Desktop Procedures.

### I. M. COMMANDING

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Figure 1-1.--Sample format MMPN Commander's Maintenance Policy Statement--Continued.

SOP FOR MAINTENANCE MANAGEMENT

HEADING

4790

MMO

Date

From: Commanding Officer, (Unit)

To: Distribution list

Subj: MAINTENANCE MANAGEMENT POLICY NOTICE 2/00, MAINTENANCE  
MANAGEMENT TRAINING

Ref: (a) MCO P4790.2  
(b) ForO P4790.3A

1. Commodities will submit training schedules for their respective areas to the S-3, via the MMO for inclusion in the training schedule.

2. Maintenance management training will be held each Thursday in Bldg 456, MMO Classroom, from 1500-1630. All maintenance management personnel and at least one representative from each commodity will attend. A copy of each class roster will be forwarded to the S-3 for inclusion in training records.

3. The MMO will report the level of participation in the maintenance management training program to the Commanding Officer.

I. M. COMMANDING

DISTRIBUTION: A



# SOP FOR MAINTENANCE MANAGEMENT

## HEADING

4790  
MMO  
Date

From: Commanding Officer, (Unit)  
To: Distribution list

Subj: MAINTENANCE MANAGEMENT POLICY NOTICE 3/00, MAINTENANCE  
MANAGEMENT POLICY NOTICES (MMPN) IN EFFECT SEMI-ANNUAL  
CHECKLIST

Ref: (a) ForO P4790.3A

1. In accordance with the reference, the following MMPNs are  
published and in effect:

<u>NOTICE NUMBER</u>	<u>DATE</u>	<u>SUBJECT</u>
1/00	DATE	Commander's Maintenance Policy Statement
2/00	DATE	Maintenance Management Training

2. Remove all MMPNs and replace with the above listed notices.

3. The point of contact is 1stLt Smith at extension 1345.

I. M. COMMANDING

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Figure 1-3.--Sample Maintenance Management Policy Notices  
(MMPN) In Effect Semi-Annual Checklist

# SOP FOR MAINTENANCE MANAGEMENT

## CHAPTER 2

### MAINTENANCE OPERATIONS

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# SOP FOR MAINTENANCE MANAGEMENT

## CHAPTER 2

### MAINTENANCE OPERATIONS

#### 2000. MAINTENANCE POLICY

1. MARFORRES units will establish a maintenance management system, at all levels of command, in the management of equipment maintenance. MCO P4790.1, MCO P4790.2, directives issued by higher headquarters, and this manual set forth these management procedures.
2. Ground maintenance management consists of management policies, procedures, and goals designed to improve equipment readiness. MARFORRES units will accomplish this through training and supervising personnel in the following:
  - a. Testing.
  - b. Repairing.
  - c. Modifying.
  - d. Calibrating.
  - e. Inspecting.
  - f. Preventive Maintenance Checks and Services (PMCS).
  - g. Corrective Maintenance.
  - h. Preserving equipment.

#### 2001. ASSIGNMENT OF OPERATORS

1. Units will assign a specific operator to each Principal End Item (PEI) of equipment for the performance of operator maintenance. When necessary, operators may be assigned the responsibility for more than one item of equipment. When responsibility for an item of equipment cannot be assigned to a specific operator, the commander is encouraged to place that equipment in an appropriate out-of-service program, i.e., administrative storage program (ASP) or local administrative deadline program (ADMDL). Further guidance concerning these programs can be found in chapter 6 and chapter 8 of this manual.

2. The unit's MMSOP or MMPN will specify the conditions under which operators can operate items of equipment other than those to which they are assigned. When doing so, commanders must emphasize proper dispatching procedures and ensure personnel are qualified to operate the equipment being dispatched. Units will list all equipment requiring assignment of operators by Table of Authorized Materiel Control Number (TAMCN), Identification Number (ID), and nomenclature.

#### 2002. ALLOCATION OF MAINTENANCE TRAINING/PERFORMANCE TIME

1. Commanders will place equal emphasis on operators and supervisor training as that given to operational and tactical training. The MMO will coordinate with the training officer of the unit to ensure training is scheduled and accomplished.
2. Commanders will allow adequate time for maintenance before, during, and after scheduled deployments, tactical exercises, Annual Training (AT), or other training events. During the planning for upcoming drills, MMOs and MMCs must coordinate with the training officer to ensure adequate time is allocated for maintenance efforts.

#### 2003. SHOP OPERATIONS

1. Unit MMOs, Maintenance Officers (MO), Maintenance Management Chiefs (MMC), and commodity managers are responsible to their commanding officers for the effective operation of maintenance shops. Unit MMOs, MOs, MMCs, and commodity managers will establish procedures which provide for systematic forecasting and scheduling of equipment maintenance, orderly work flow, safe and efficient use of resources, and a functional Quality Control (QC) program. Skilled supervision will be provided to unskilled personnel and personnel who possess only basic skill levels during maintenance operations. MCO P4790.2\_ provides detailed shop operation requirements.
2. Commanders will designate, in writing, the title, authority, and responsibility of key maintenance personnel. Additionally, commanders will designate all areas where maintenance will be performed.
3. Commanders will assign priorities to Equipment Repair Orders (EROs) and associated ERO Shopping Lists (EROSLs) per MCO 4400.16\_. The following guidance is provided:

a. MARFORRES is assigned Force/Activity Designator (F/AD) IV with the associated priority designators of 07, 09, and 14. Units deploying to Combined Armed Exercises (CAX) and AT are authorized to use F/AD III (priorities 03, 06, and 13). This authorization applies only to equipment slated for deployment. Use of F/AD III is authorized commencing 90 days prior to the actual deployment date and 30 days upon receipt of equipment. The downgrade of the exercise requisitions back to F/AD IV after the deployment is not required.

b. When a Mission Essential Equipment (MEE) and a PEI listed in Marine Corps Bulletin (MCBul) 3000 series can not perform its intended mission, and/or the deadlining malfunction cannot be repaired within a 24-hour period, place the equipment in a combat-deadlined status and assign Urgency of Need Designator (UND) "A" based on the units inability to perform its mission. Required management actions for UND "A" requests are as follows:

(1) Organizational Maintenance and Supply Support. As set forth in MCO P4400.150\_ and MCO 4400.16\_, the unit commander will ensure all requisitions assigned UND "A" will have the appropriate Required Delivery Date (RDD) and Not Mission Capable Indicators (NMCI) assigned.

(2) Intermediate Maintenance Support. Personnel will be designated, in writing, by the commanding officer to sign the UND "A" ERO prior to submission. The priority on related source documents will be determined by the priority designator of the primary ERO. Commanders will have resources available on a 24-hour basis to receive equipment from the Intermediate Maintenance Activity (IMA), which has been repaired under UND "A".

c. ERO/EROSL Signature Authority. EROs will be signed by personnel designated in writing by the Commanding Officer. Provide a copy of the letter of authorization to the appropriate supporting activities. A Letter of Authorization will contain sample signatures of those personnel authorized to sign EROs, EROSLs, and release/receipt documents to include personnel authorized to receive and deliver materiel and equipment. At a minimum, update the authorization letter semi-annually.

d. ERO Priority Upgrade. In order to meet operational requirements, the unit commander may authorize a priority upgrade on maintenance and supply requests. If the equipment is evacuated to the IMA, the commander or a designated representative will request a priority upgrade via official

correspondence. Send the correspondence directly to the supporting facility. In situations that require an immediate response, a telephone call to the supporting establishment will suffice. Follow-up all telephone calls with official correspondence identifying the need for the immediate change to the equipment's priority. All priority upgrade requests will be signed by personnel designated in the unit's letter of authorization. Commanding officers or personnel designated to sign UND "A" must sign the ERO priority upgrade requests. Figure 2-1 (pg 2-14) provides an example of an ERO Priority Upgrade letter.

e. Changing Priorities. An additional signature and date is required when the priority of the ERO is upgraded and the original signer does not have the authority to assign a higher priority. To change the priority of an ERO, make the following entries:

(1) Line out the old priority in blocks 52 and 53 of the ERO.

(2) Enter new priority and date in the "Description of Work" block. If a new signature is required, enter signature in the "Mechanic Signature" block.

(3) Annotate the new category code, if required.

Note: Changes in the ERO priority may constitute a required change in outstanding part requisitions.

f. Use of Deadline Control Dates (DCDs) on Category Codes "M", "P" and "C" EROs. Proper use of the DCD will provide the MMO with an indicator of the operational status of a non-reportable PEI or a component of a PEI. To clarify, UM 4790-5 and TM 4700-15/1, use DCDs on category code "M", "P", and "C" EROs if the equipment is actually deadline. Do not use a DCD if the equipment is in a degraded status or when critical repairs do not deadline the end item.

g. ERO Category Code/Urgency of Need Designator Assignment. MCO 4400.16 defines the relationship of priorities to UNDS and F/ADs. The following matrix identifies the appropriate UND to be used for the assignment of priorities to category codes:

<u>CATEGORY CODE</u>	<u>URGENCY OF NEED DESIGNATOR</u>
M	A OR B
N	C
M	A OR B
N	C
P	A OR B
C*	A, B, OR C
X	B
D, F	A, B, OR C
K	A, B, OR C
O, S	C

\* NOTE: For Category Code C EROs, a base ERO of similar or greater priority must be open.

\* NOTE: For Category Code D, F, or H EROs with a secondary reparable item that an exchange has been made, the Repairable Issue Point (RIP) OIC will determine the urgency of need designator.

h. Use of Job Status "UNIT RECALL". Use "UNIT RECALL" only after a PEI is properly inducted into the maintenance cycle and repair parts are requisitioned. The owning unit may request the PEI be returned to the unit for use while awaiting the ordered parts. The "UNIT RECALL" status will reflect that the PEI is short parts and that the PEI has been returned to the owning unit until all required repair parts have been received. Do not run "UNIT RECALL" status on PEIs that are Not Mission Capable Supply (NMCS) deadline. Do not use "UNIT RECALL" for planning EROs.

#### 2004. EQUIPMENT THAT EXCEEDS MAINTENANCE CAPABILITIES

1. General. The following methods are available for equipment exceeding unit's maintenance capabilities as defined in current Tables of Organization (T/O):

a. 4th Maintenance Battalion, 4th FSSG (Contact Team Request).

b. Increased Echelon of Maintenance (IEM).

c. Repair and Return Program (R&R).

d. Letter of Agreement with USMC units.

e. Inter-Service Support Agreements (ISSAs)

f. Commercial Services

## 2. Evacuation Criteria

a. When repairs exceed the unit's authorized echelon of maintenance, evacuate equipment to the next higher echelon. Prior to evacuation, equipment will have:

(1) An ERO submitted into MIMMS Automated Information System (AIS) at the echelon of maintenance authorized the using unit.

(2) Completion of required 1st and 2d echelon maintenance, as far as possible.

(3) Identified 2d echelon parts and requisitions.

(4) Collateral equipment removed, unless required by higher echelon for repair.

b. MIMMS-AIS supported units are not required to establish a first echelon record on their Daily Process Report (DPR) for items evacuated from 1st echelon to 2d echelon. When equipment is evacuated to 3rd echelon, a 2d echelon ERO will be opened. Units will adhere to the following equipment evacuation procedures:

(1) 2d/3rd echelon EROs will be prepared.

(2) Organizational maintenance activities will determine the actual status (category code "M", "X", etc.) of the equipment. The maintenance section authorized to perform the maintenance will record the required maintenance into the Field Maintenance Subsystem (FMSS).

(3) The unit evacuating the equipment will receive the yellow copy of the ERO or a customer receipt for the equipment.

c. Contact Team Maintenance. 4th Maintenance Battalion, 4th FSSG or the appropriate detachment, will provide contact team maintenance support. Submit requests for contact teams directly to the supporting facility. The request will cite the Table of Authorized Materiel Control Number (TAMCN), nomenclature,



type of maintenance required, ERO request number, quantity, location, points of contact, and telephone numbers. Requests may be submitted via telephone, electronic e-mail, or Facsimile.

d. Authorization to Exceed Designated Echelon of Maintenance. Submit all requests for IEMs to the MARFORRES (G-4) via the MMO/LSSO database. Figure 2-2 (pg 2-15) applies in cases where a unit cannot access the MMO/LSSO Database. Requests must meet the criteria established in MCO P4790.2 and will be a one-time repair for a specific TAMCN. Should there be a need for a continual IEM, submit a request with ample justification to MARFORRES (G-4). Maintain requests and approvals in the MMOs turnover file. Requests for IEM are not required when the criteria listed in MARADMIN 110/00 "Common Sense Approach to Maintenance" is satisfied.

e. Limited Technical Inspection (LTI) Maintenance Support. Use LTIs to determine the extent and level of maintenance required to restore equipment to a specific condition. The following guidance applies:

(1) MARFORRES units will use organic maintenance resources to perform LTIs required by:

(a) Temporary loans, internal and external, to the MARFORRES.

(b) Small arms pre-fire inspections (PFI).

(c) Equipment declared as excess materiel, and is designated for either internal MARFORRES redistribution or transfer, as directed by higher headquarters (Recoverable Item Report (WIR) apply).

(d) Accident investigations not involving intermediate level repairs, unless otherwise directed.

(2) Responsibility for the completion of LTIs is divided between organic shops and IMAs based on the type of LTI. If an IMA contact team is required, submit LTI requests a minimum of 45 working days prior to the date the LTI is to be performed.

3. Equipment Recovery. Units will not recover any equipment evacuated to the IMA until all required repairs are complete. The following exceptions apply:

- a. As specifically authorized by this headquarters.
  - b. While awaiting non-critical repair parts on valid requisition.
4. Replacement of Unserviceable Recoverable Items. The procedures for replacement of unserviceable WIRs are discussed in MCO P4400.82\_ and amplified as follows:
- a. To avoid excesses because of recoverable items action by the IMA, units will not place deficiencies on backorder until the following items are received from the IMA:
    - (1) The completed ERO (FAX).
    - (2) The Marine Corps Logistics Bases (MCLB), Albany/Barstow disposition instruction message.
    - (3) DD Form 1348 (Supply Document) indicating that the disposition action has been completed.
  - b. The physical receipt of these documents is the unit's authority to drop the item from the supply records and to requisition a replacement item.

## 2005. PERFORMANCE OF MAINTENANCE SERVICES

1. Policy. All equipment Preventive Maintenance Checks and Services (PMCS) will be performed on a scheduled basis in accordance with appropriate Technical Manuals (TM) except when additional guidance has been published by higher headquarters. When no requirement to conduct PMCS is stated in the appropriate TM, or no equipment manual exist for equipment, no scheduled maintenance interval needs to be designated and no scheduled maintenance needs be accomplished beyond first echelon. For those items with a stated scheduled maintenance requirement and no interval designated, the commander will designate an interval not to exceed the designated interval listed in the appropriate commodity chapter of TM 4700-15/1.
2. Coordination of Unit Maintenance Requirements. Commanding officers will exert every effort to combine optimum utility and efficiency from all maintenance resources available to them. Commanders will monitor the maintenance requirements of their subordinate units and ensure that requirements do not exceed capabilities. Commanders will designate alternate sources of

maintenance support as necessary to balance workloads in subordinate units and determine overflow levels at which work can be evacuated to the next source of maintenance support.

3. Post Exercise/Deployment Maintenance. Post exercise/deployment maintenance is one of the most neglected maintenance operations.

Post exercise maintenance is essential in restoring a unit's readiness posture in the shortest time possible. The S-4/MMO, in coordination with the S-3, will schedule adequate time following each training exercise, AT, tactical operation, or deployment to perform preventive maintenance/corrective maintenance (PM/CM).

4. Preventative Maintenance Checks and Services. PMCS will be completed as dictated by appropriate technical manual and the preventive maintenance schedule. However, the PM schedule may be altered to accommodate operational commitments, not to exceed the maximum service intervals. Instructions for use and completion of the PM roster are found in the current edition of TM 4700-15/1. Any deviations from the PM schedule must be documented in the "REMARKS" block of the NAVMC 10561.

a. First echelon (operator) maintenance of an end item will normally be performed by the individual assigned to that piece of equipment.

b. Reduced PMCS intervals may be authorized at the commander's discretion; MCO P4790.2 applies.

c. Integrate PM with CM (and vice versa) to the greatest extent practicable to gain the most economical use of all available maintenance resources.

d. Required PM services will be the responsibility of the responsible officers (ROs). CM services will be the responsibility of the assigned commodity officers maintenance/managers within their EOM.

e. Perform CM action in accordance with the procedures established in the appropriate TMs.

## 2006. RECORDS

Equipment Records. Equipment records are those records which are maintained for a specific item of equipment. TM 4700-15/1 contains detailed instructions concerning the purpose, use, completion, and disposition of equipment records.

2007. REPORTS

1. AIS/INFOPAC. Units will use the MIMMS AIS/InfoPac for recording and managing maintenance activities. The FMSS provides USMC units an information system for MIMMS AIS reporting. MCOs P4790.1\_, P4790.2\_, UM 4790-5, MCO 3000.11\_, and TM 4700-15/1\_ provide guidance and background on the FMSS. The MIMMS AIS/InfoPac is an automated management information program that provides timely, manageable data, which originates at the source of equipment maintenance. Commanders, therefore, will ensure that procedures are in place for screening documents prior to input and for the monitoring of output reports.
2. Reports will be provided using the systems identified by the MARFORRES Maintenance Information System Coordination Office (MISCO). Refer to MCO P4790.2\_ for further guidance concerning the flow of FMSS report generation.
3. Responsibilities for report validation and reconciliation are delineated in Appendix C of MCO P4790.2\_. When a command elects to deviate from these procedures, additional guidance must be provided in the command's MMSOP or MMPN.

2008. MODIFICATION OF EQUIPMENT

1. Responsibility. Owning unit commodity managers are responsible for ensuring all equipment modifications are properly applied, recorded, and reported via a modification control program. Establish and maintain modification control program per MCO P4790.2\_ and TM-4700-15/1\_.
2. Modification Control Program. MCO P4790.2\_ and TM-4700-15/1\_ outlines the procedures for maintaining modification records and reports. Unit modification control points will adhere to the tasks listed below in the establishment of their modification control program. Manual modification records will be reviewed during formal inspections.
3. Chapter 2-5 of TM-4700-15/1\_ contains detailed information on modification record keeping.

2009. SUPPORT AND TEST EQUIPMENT

1. Calibration. Test, Measurement, and Diagnostic Equipment (TMDE) are sophisticated tools that require control, inventory, and maintenance. The main emphasis of TMDE maintenance is accuracy, which is validated through calibration. Calibration of unit TMDE is a command responsibility. MARFORRES units will establish and maintain TMDE calibration control programs in accordance with the procedures outlined in the current editions of MCO 4733.1, TM 4700-15/1, and MCO P4790.2\_. MARFORRES units evacuating TMDE for calibration/repair will ensure proper packing and insulation.

2. Technical Instructions (TI) in the 4733 series provide guidance to determine those items of equipment in the inventory that require calibration. These items will normally be listed in the FEDLOG and assigned an operational test code (OTC) of 3. If calibration requirements cannot be determined from the applicable references, request assistance through the local calibration facility.

3. MARFORRES units will ensure that the following is accomplished for all TMDE requiring calibration and/or repair:

a. Prepare an ERO in accordance with the current edition of TM 4700-15/1.

b. Submit the appropriate MIMMS transactions in accordance with the UM 4790-5.

c. The owning unit will properly pack the TMDE in an appropriate container to protect the tool(s) from being damaged. Enclose three copies of the ERO, for delivery to the calibration facility if applicable.

d. The calibration facility will repack the TMDE for delivery back to the owning unit upon completion of the calibration/repair, if applicable.

SOP FOR MAINTENANCE MANAGEMENT

UNIT HEADING

4790  
MMO  
DATE

From: Commanding Officer, \_\_\_\_\_  
To: Commanding Officer, 4th Maintenance Battalion (MOS) or  
Supporting CSSE  
Via: (1) Commanding Officer, (Applicable Support Group)  
(2) Commanding General, 4th Force Service Support Group  
(AC/S, G-4)

Subj: REQUEST FOR EQUIPMENT REPAIR ORDER (ERO) PRIORITY UPGRADE

Ref: (a) ForO P4790.3A

1. In accordance with the reference, it is requested that the priorities of the below listed EROs be upgraded:

	UNIT	EVAC	SERIAL	OWNING
<u>TAMCN</u> <u>NOMENCLATURE</u>	<u>ERO</u>	<u>ERO</u>	<u>NUMBER</u>	<u>PRI</u> <u>UNIT</u>

2. In addition, it is requested that all critical Class IX repair parts, and secondary repairables that deadline the end item, be upgraded accordingly.

3. State the reason for request.

4. The point of contact for this request is \_\_\_\_\_, at extension \_\_\_\_\_.

I. M. COMMANDING

Figure 2-1.--Sample Format of Request for ERO Priority Upgrade.

SOP FOR MAINTENANCE MANAGEMENT

UNIT HEADING

4790  
MMO  
DATE

From: Senders' Name & Unit/Address

Subj: REQUEST FOR INCREASE ECHELON OF MAINTENANCE (IEM)

Ref: (a) ForO P4790.3A  
(b) TM 4700-15/1

Request Information:

1. Type of IEM: (2d Echelon, 3rd Echelon, 4th Echelon)
2. List the type of repairs:
3. TAMCN:
4. ID Number:
5. Model Number:
6. Personnel: Name, MOS, Rank, I&I or Reserve.
7. MARES Reportable: (Yes or No)
8. Will IEM interfere with unit's mission: (Yes or No)
9. List, by TAMCN, tools/test equipment on-hand to perform IEM:
10. Special instructions:
11. The point of contact for this command:
12. Remember to setup review cycle and submit for review:

Figure 2-2.--Electronic Sample Format of Request for Increased Echelon of Maintenance (IEM).

# SOP FOR MAINTENANCE MANAGEMENT

## CHAPTER 3

### SUPPLY SUPPORT

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# SOP FOR MAINTENANCE MANAGEMENT

## CHAPTER 3

### SUPPLY SUPPORT

#### 3000. GENERAL INFORMATION

1. Units will conduct the requisition, receipt, storage, and issue of repair parts and materials in accordance with MCO P4790.2\_, MCO P4400.150\_, and UM 4400-124.

#### 3001. REPAIR PARTS REQUEST SYSTEM

1. Use an ERO whenever maintenance resources are expended at second echelon or higher levels of maintenance. When repair parts or materials are required to complete such services, list these requirements on an EROSL (NAVMC 10925) and forward to the appropriate supply source. The EROSL becomes a record of receipt, cancellation, and transfer for pending and issued demands. Use the EROSL as the source document for entry of demands into the SASSY/ATLASS system. UM 4400-124 contains detailed procedures for requisitioning repair parts and maintenance related materiel.
2. Priority Designators for Repair Parts. Both MCO 4400.16\_ and UM 4400-124 contain instructions for the assignment of requisition priority designators and the control of their proper use. Assign priority to EROSLs consistent with applicable EROs. Repair part priorities will vary with the repair categories of the ERO in instances where an ERO priority has been raised and subsequently lowered due to critical repairs of combat equipment.
3. Units will ensure that repair parts approaching the RDD in accordance with MCO P4400.150, are validated in the most expedient manner. Repair parts with a RDD will be further defined in policy established by MARFORRES Supply.

#### 3002. REPAIR PARTS CONTROL

1. Maintenance activities are not authorized to maintain repair parts or components except for those associated with specific maintenance, shop overhead, or Pre-expended Bins (PEBs).

## 2. Pre-expended Bins (PEB)

a. Establish a PEB in unit maintenance activities in accordance with MCO P4790.2\_, UM 4400-124, MCO P4400.150\_, and messages. Do not substitute PEBs for normal means of obtaining seldom used repair parts. The MMO, MO, MMC, and the supply officer will coordinate PEB requirements to avoid excess and unused stock.

b. No further supply accounting is required once an item is procured and placed to the PEB. However, MCO P4400.150\_ dictates simple procedures required for locating, identifying, and establishing when to replenish the items.

c. The unit MMO and Supply Officer will establish internal procedures for identifying, locating, reordering, and compiling usage.

### d. Implementation Procedures.

(1) Do not report, in the MIMMS AIS, PEB items used in quantities of less than one U/I. Units may establish a system for recording usage of these items; however, there is no requirement to account for portions of bulk items (e.g. 10 of a gross, 8 of 100, 30 feet of a reel, etc.).

(2) Use a local document number on the EROSL to input PEB data into MIMMS AIS. The document number will consist of the unit's Activity Address Code (AAC), current Julian date, and a document serial number beginning with the figure "7" for CM and "9" for PM.

3. Non-System Demands. Not all parts associated with an end item are assigned a NSN during the provisioning process. Occasionally, a required part has a NSN assigned, but for a variety of reasons, the NSN is not reflected on the Master Header Information File (MHIF). In this instance, units should coordinate with their unit supply for assistance in preparing the request to load NSNs to the MHIF to be submitted to the ISSA.

4. Excess Repair Parts. Maintenance shops will not hold excess repair parts or materiel for secondary repairables. Excess repair parts obtained through normal requisition channels represent wasted maintenance dollars. Excess repair parts obtained through non-SASSY means represent repair parts not available to other units that may have a need. The monetary loss to units and the Marine Corps based on stockage of excess repair parts is unacceptable and can not be tolerated at any level

of command. Units will identify excess repair parts to unit supply officers for rollback transactions.

5. Cannibalization and Selective Interchange

a. Cannibalization. Cannibalization is considered an exceptional maintenance procedure. Cannibalization is authorized only for mission-essential combat equipment when an operational commitment is imminent, and only when it appears that required repair parts cannot be obtained in a timely basis. Cannibalization will only be used when all other means of repair/replacement have been exhausted. The Commander, MARFORRES (G-4) will be the only authorization authority for cannibalization.

b. Selective Interchange. Selective interchange is the exchange of a selected serviceable repair parts/components from a deadlined item of equipment for an unserviceable repair parts/components from a like item. The exchange must be complete to qualify as selective interchange. The difference between cannibalization and selective interchange is that selective interchange addresses the replacement of the removed serviceable repair part/component, whereas cannibalization does not. This fact has led maintenance personnel to the erroneous belief that selective interchange is not cannibalization. By definition, removal of serviceable parts/components from one item for use in repairing another item selective interchange is, in fact, a lesser degree of cannibalization. As such, the conduct of selective interchange shall require the same authorization as cannibalization.

c. Do not employ maintenance by cannibalization or selective interchange, except under the following circumstances:

(1) When there is a need to ensure that a minimum number of mission-essential combat equipment is deadlined at any one time for lack of critical repair parts. Maintenance by cannibalization or selective interchange is considered to be an exceptional procedure and is authorized for only mission-essential combat equipment when an operational commitment is imminent, and only when it appears that the required part may not be obtained in a timely basis. Generally, such procedures will be done at the lowest echelon having the maintenance capability to accomplish the same.

(2) As directed by CMC (Code LP).

d. Commanders/Officers-in-charge of IMAs may authorize the interchange of component end items/secondary repairables as part of the normal maintenance process of reportable equipment. The IMAs indicated herein are those units authorized by the T/O cover page to perform at least intermediate 3d echelon maintenance. IMAs may be an authorized maintenance float or sub-float holder, i.e., maintenance companies of maintenance battalions, and detachments of the FSSG. At the time of the interchange, command and maintenance facility levels will implement managerial control practices to ensure that:

(1) Owning unit commanders of the equipment from which the serviceable parts/components are to be removed have approved such action.

(2) The equipment from which serviceable parts/components are to be removed will not, as a result of such removal, become a candidate for the WIR by exceeding the one-time cost of repair authorization, or exceed the maximum maintenance cycle time for repair. The conduct of the secondary reparable interchange must be in the best interest of the Marine Corps; i.e., it must be cost-effective and result in the removal of one item of equipment from deadline without degrading another item of equipment beyond economical repair.

(3) The unserviceable parts/components and associated supply requisitions are identified with the item of equipment from which the serviceable items were removed. Unserviceable parts/components that are not repairable will be disposed of in accordance with UM 4400-124. When considering secondary reparable interchange action, sufficient time must remain within the maximum allowable maintenance cycle time for supply to properly respond to demands.

e. To track spare parts and equipment removed from an asset during cannibalization/selective interchange, use an EROSL with advice code "IN". Conversely, use an EROSL with advice code "SC" to track spare parts and equipment applied to an asset during cannibalization/selective interchange.

6. Repair Parts Reclamation. A unit commanding officer may authorize reclamation of repair parts or components from the Defense Reutilization Management Office (DRMO) or other like sources. Strict accountability of such repair parts/components will be affected to ensure excesses are not held.

- a. All scrounged parts usage will be reported via a "4" or "8" transaction per instructions contained in UM 4790-5.
- b. Commodity managers will go through their unit supply office to get the proper authority to draw materiel from DRMO.
- c. Personnel will ensure the DD 1348 is provided to the unit supply section. The unit supply section will maintain the DD 1348 on file for two years.
- d. Report via a "4" transaction with advice code "SC" usage of repair parts received from other than the normal source of supply (other than PEB). For items normally stocked in the PEB, paragraph 3002.2.h.1 of this Manual applies.

7. ERO Parts Bins. Establish ERO parts bins in unit maintenance activities in accordance with MCO P4790.2 and other related messages. In addition, the following additional guidance is provided:

- a. Once repair parts are delivered to the maintenance area from the ERO parts bin, annotate the shop copy of the EROSL with the date and quantity received. The Marine designated to manage the ERO parts bins will initial the applicable document number on the shop copy of the EROSL as the parts are stored.
- b. When parts are issued to a technician or shop chief, annotate the EROSL with the date, the quantity issued, and the initials of the Marine who received the part.
- c. Store parts that have been removed from an item of equipment to facilitate repair in the ERO Parts Bin. Parts will be tagged or marked with the appropriate ERO number. Do not use parts that have been removed from an item of equipment to repair another item of equipment.

### 3003. DIRECT EXCHANGE (SECONDARY REPAIRABLE ITEMS PROGRAM)

1. Due to the dispersion of 4th Maintenance Battalion and 4th Supply Battalion, and in the absence of an ISSA, secondary repairables, or Condition Code "H" items, will be replaced via the Recoverable Items Program. The current editions of MCO P4400.82 and UM 4400-150 discuss this program in detail.

2. Units within MARFORRES with access to maintenance floats will be guided in all transactions by float SOPs established by the supporting activity.
3. Secondary Depot Level Repairables (SDLRs) will be guided in submission and exchange in accordance with applicable MARFORRES supply/fiscal policy letters until the Marine Corps publishes changes to existing manuals.
4. Submit requests for the outsourcing of secondary repairables through the WOLPH database. The MARFORRES G-4 will review and approve/disapprove all requests. If approved, units make a 4-Add parts transaction in MIMMS using Advice Code 99 to show that the part was outsourced and is a Non-SASSY parts requisitioned item. An 8-Transaction is required to close the parts transaction.

#### 3004. INTRODUCTION OF NEW EQUIPMENT

1. New equipment is continuously being introduced. All new equipment will require some degree of operator and maintenance training, repair parts, supporting tools, and test equipment.
2. Prior to releasing the equipment to the field, COMMARCORLOGBASES in conjunction with MARCORSYSCOM will publish a Users Logistics Support Summary (ULSS) providing specific guidance with respect to allowances, requisitioning authority, required tools, initial logistics provisioning, supporting publications, and personnel training requirements.
3. The MARFORRES (G-4/Supply/Maint), upon receipt of a ULSS, will review the support concept and related correspondence. Guidance will be published as necessary.
4. Responsibilities.
  - a. Commanders will review the appropriate ULSS for each new item of equipment. Particular emphasis on the support concept and related correspondence should be placed to determine the total quantity, complexity, and associated requirements of the item to be received.
  - b. Commanding officers of units receiving new items of equipment will:

(1) Ensure all new items of equipment received are kept in an Administrative Deadline (ADMDL) status until a request to place in service is submitted to MARFORRES (G-4/MMO) via the MMO/LSSO or current database. Additionally coordination and completion of an acceptance LTI is required to initialize the maintenance history of the equipment per MCO P4790.2\_.

(2) Initiate and submit reports, when required, and promptly report any deficiencies encountered with placing the equipment into service to MARFORRES (G-4/MMO).

(3) Ensure sufficient security is provided to prevent unauthorized use of equipment, and that the equipment receives adequate protection from possible cannibalization or other abuse.

(4) Ensure readiness reportable assets are reported on the unit LM2 report as established by MCO 3000.11\_ and the current MCBul 3000.

(5) Ensure RM4 remarks are submitted reflecting equipment placed on ADMDL. RM4 remark guidance is published in Chapter 9 of this manual.

(6) Ensure Product Quality Deficiency Reports (PQDR) and Report of Discrepancies (ROD) are submitted, if necessary.

3005. MOBILIZATION: SOURCING THE "DELTA". The units' current Mobilization Plan (MPLAN) will provide specific guidance and instruction on mobilization should the Marine Forces Reserve receive direction to mobilize. Any scenario or situation concerning maintenance of equipment or sourcing the "Delta" (the difference between the units' T/E authorized and the on-hand T/A) that is not covered in the MPLAN should be directed to the MARFORRES (G-4/Supply). The policy and procedures outlined in this Manual will remain in effect, during any period of mobilization, until the SMCR unit is attached to its gaining command.

#### 3006. VALIDATION AND RECONCILIATION.

1. Frequency and Procedure. Maintenance validation and reconciliation with supply will be accomplished weekly. Procedures contained in MCO P4790.2\_, Appendix C will be used. One validation/reconciliation should be scheduled on a drill weekend for training of SMCR personnel. The units local policy

will outline, in detail, the procedures and frequencies for conducting validation/ reconciliation, however, minimal reconciliation time frames will be enforced.

2. Validate ERO parts bins on a weekly basis.

### 3007. TOOL SETS, CHESTS, AND KITS

1. MCO P4790.2\_, MCO P4400.150\_, and UM 4400-124 establish the criteria for the accountability of tool sets, chests, kits and components of PEIs. Maintain a copy of the applicable SL-3, SL-3 extract, or applicable inventory listing in the tool set, chest, or kit, or in a file folder. The tool NCO/commodity manager will maintain the inventories in a secure area. The unit MMO, Maintenance Officer, and Supply Officer, will match tool sets, chests, and kits to the T/E or T/A allowance list to ensure all items are on-hand. Make a complete inventory of all tool sets, chests, and kits using the current SL-3 extract or applicable inventory listing. Additionally, conduct an inventory of common tools that have unit-commander established allowances. MMOs are the supervisory level for control measures applicable to tool sets, chests, and kits.

2. Inventory Criteria. Use the following criteria to determine the minimum frequencies of inventories:

a. Annually, inventory tool sets, chests, and kits and individual hand/portable power tools, which are not issued and are securely stored.

b. Inventory at least semi-annually tool sets, chests, or kits, which are issued to, and used by, the same individual on a semi-permanent basis, and where locks and a secure storage area is provided.

c. Semi-annually inventory all other tool sets, chests, and kits and individual hand/portable power tools.

d. Discrepancies (e.g., missing or damaged components) noted during a personnel turnover or regular inventory will be resolved per MCO P4400.150\_, UM 4400-124, and/or the Manual of the Judge Advocate General (JAG Manual).

e. The owning unit will order shortages within sets, chests, and kits discovered at the time of initial issue from the supply system, with the exception of those items, that are not owning-unit responsibility. In this case, submit a ROD.



f. Maintain inventory control forms for one year; MCO P4790.2\_ applies. Inventory control forms will contain the signatures of the individual conducting the inventory and the supervisor, and the date of the inventory. Inventories will contain a listing of all component tool kits.

3. Maintenance. The inventory will include an inspection of all tools for serviceability and cleanliness, and will ensure the tools are free of rust and dirt. Tools that are unserviceable will be repaired, (e.g., replacing broken handles, dressing of chisels, screwdrivers, etc.) or replaced.

4. Replenishment. Replacements for missing or unserviceable tools will be requisitioned in accordance with UM 4400-124. Control must be maintained by the suspense copies of the requisitions for components of tool sets, chests, or kits. Annotate the remarks section of the inventory form with the document number for missing items. Commanders must ensure that missing tools are challenged. Tool control must be strictly enforced. If the missing item warrants investigation, appropriate actions should be taken.

5. Excess. Return excesses resulting from changes to authorized allowances, quantity changes, or any other condition, which generates excesses, to the Tool Room Supervisor/NCO for redistribution to deficient sets, chests, and kits within the unit. Any additional excesses will be returned through the supply system. Maintain a copy of the authorization for special allowance tools on file in the commodity area. Maintain locally produced inventory forms, similar to forms displayed in MCO P4790.2\_, for all special allowance tool sets on file. Many SL-3 inventories were discontinued and moved to the operators/users manual for the item; refer to these before producing local forms. Conduct inventories semiannually.

6. Secure tool sets, chests, or kits issued to individuals when not in the custody of the individual. Maintain tool boxes held in the section tool room in an area secure from pilferage. Units will establish logbooks in tool rooms to account for issues and receipts of special/component tool kits and individual tools.

7. Commanders will establish specific periods for the conduct of tool accounting and inventories in their unit's training schedule.

# SOP FOR MAINTENANCE MANAGEMENT

## CHAPTER 4

### MAINTENANCE MANAGEMENT TRAINING

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## SOP FOR MAINTENANCE MANAGEMENT

### CHAPTER 4

#### MAINTENANCE MANAGEMENT TRAINING

##### 4000. GENERAL INFORMATION

1. Maintenance and maintenance management training is a command responsibility. The first two priorities of the Marine Corps Training Program are mission-oriented training and skill-progression MOS training. Every MARFORRES unit has a maintenance mission, which is outlined in the logistics capabilities paragraph of the T/O cover page. Maintenance training will be conducted commensurate with the level of maintenance authorized. Unit T/Os list specific equipment operators/technicians who require maintenance related training.

2. Five areas of maintenance related training require emphasis: operator training, technician training, maintenance supervisor training, maintenance management functional area training, and safety training. Determine operator and technician training requirements by a review of MCO P1200.7\_ (MOS Manual), MCO 1510 series (ITS Manuals), applicable TMs, and an inventory testing of operator and technician knowledge levels. Aim maintenance supervisory and maintenance management functional area training programs at isolating trouble spots and implementing corrective actions to upgrade procedures. Aim functional area training at clerk-level personnel who operate functional area programs in the commodity area.

3. MMOs will ensure operator, technician, maintenance supervisor, functional area training, and safety training requirements are included in the unit training SOPs and quarterly training plans. Unit S-3s, with the advice and assistance of unit MMOs, will schedule and coordinate maintenance-related training with mission-oriented training, skill-progression training, and operational commitments.

##### 4001. TRAINING REQUIREMENTS

1. Commanders will ensure that a minimum of one hour per quarter is scheduled in the annual training plan for each operator, technician, maintenance supervisor, maintenance management functional area training, and safety training. Four combined hours of the training previously mentioned is required each quarter.

Aim training at eliminating deficiencies determined by evaluation of maintenance personnel and their supervisors. Design programs to satisfy both the individual Marine to fill positions of higher grade and increased responsibility.

2. Maintenance and maintenance management training may be accomplished in a number of different ways. The following methods may be used: Formal schools, field training, on-the-job-training (OJT), technical training, and cross training. Selecting a method depends on the skill level of the maintenance personnel, the resources available to the unit, the operational commitments of the unit, and the skill level required by maintenance personnel.

a. Maintenance Management. Conduct maintenance management training for all maintenance management personnel, commodity managers, commodity clerks, and selected supply/logistics personnel. Conduct training at the staff and organizational level under the direction of the Regimental/Group MMO.

b. MIMMS-AIS. Periodically the MMO/commodity manager will conduct MIMMS-AIS training for all maintenance managers and logistics personnel. Units will continue to develop programs for training all personnel involved with MIMMS input, equipment maintenance status, and other related automated logistical management reports.

c. MOS Training. Conduct MOS training under the supervision of the unit's MMO/commodity managers who are responsible for developing maintenance training programs and performance objectives. Unit-level commodity managers are responsible to ensure that all scheduled training is in accordance with the ITS. MMO/commodity managers will recommend changes to the training policy as required. Training of maintenance personnel will include, but not be limited to:

(1) Refresher. Provide mechanics and technicians the level and degree of instructions to enable them to perform maintenance duties commensurate with their rank and MOS.

(2) Qualification. Place unskilled mechanics and technicians on a planned schedule of directed training to qualify them for assignment of a primary MOS per MCO P1000.6\_ (ACTS MANUAL).

(3) Supervisory. Provide maintenance supervisory training to all personnel in positions of supervision. Provide training with the expertise required to effectively and economically operate the unit's maintenance program and to achieve the desired results.

d. Special Technical Training. Training is directed at a specific MOS or item of equipment. Use training to upgrade or refresh maintenance knowledge or to provide instructions on new items of equipment.

3. Formal Schools. Marine Corps Combat Service Support School (MCCSSS), Camp Johnson offers two Maintenance Management courses several times each year for MARFORRES. MARFORRES (G-3/Training) exercises staff cognizance over quotas and nominations for the MIMMS courses at MCCSSS. Information regarding the two courses is listed below:

a. The "Maintenance Management Course" is open to Marine Sergeants through Captain who are assigned to or anticipating assignment to a maintenance management billets. Emphasis is primarily upon the duties of MMOs and MMCs, however, command-level applications also receive strong emphasis. Students must possess a GT score of 100 or higher to be eligible.

b. The "Maintenance Management Reserve Orientation Course" is open to SNCO through Lieutenant Colonel; any reserve officer whose actual or anticipated assignment is a maintenance management billet and reserve SNCOs who require maintenance management training. The focus of this course is on command/commodity-level applications. Students must possess a GT score of 100 or higher.

#### 4002. FIELD TRAINING

1. Commander's Responsibilities. Commanders will ensure maintenance personnel are provided maintenance training in a field environment and are technically proficient in the performance of all authorized maintenance services under tactical conditions. Schedule a minimum of three hours of field training per field evolution. Commanders will also ensure that necessary maintenance periods are specifically designated on training schedules while operating under field conditions.

2. Maintenance Responsibilities. Perform field training and field maintenance using only T/E equipment. The performance of organizational maintenance is more challenging during deployments and/or field operations due to increased equipment usage and dispersion of equipment and maintenance assets. During such periods, commanders will place an increased emphasis on the performance of 1st and 2d echelon maintenance. Field maintenance training exercises will include equipment recovery, evacuation, and the use of field maintenance resources.

4003. ON-THE-JOB-TRAINING (OJT)

1. Use OJT as a program leading to the assignment of an MOS or as refresher training on new or unfamiliar procedures and equipment. Personnel undergoing OJT will be teamed with experienced and qualified personnel to ensure that only proper methods and procedures are highlighted to trainees. OJT will be formally scheduled, documented, and recorded in unit training records. This type of training is often done on an opportune basis, particularly when a new or unfamiliar method, problem, or procedure is encountered during normal maintenance production. All maintenance personnel are assembled, and an on-the-spot class is conducted by maintenance supervisors covering the subject area. When applied properly, OJT can be used to effectively accomplish MOS training, maintenance cross training, and new equipment training. Supervision and instruction of OJT will stress the application of approved maintenance procedures and techniques to instill sound maintenance practices and habits in the personnel being trained. Test personnel undergoing OJT at least semi-annually to determine their progress.

2. Maintenance training is also available from the IMA, 4th FSSG. Submit requests for maintenance training to this headquarters via the chain-of-command. Submit requests in accordance with Figure 4-1 and include dates, time, type of training, and number of personnel required. Training support from IMAs will be dependent upon commitments, availability, and approval of 4th FSSG personnel.

3. The Marine Corps Institute (MCI), the Department of the Army, as well as other services, offer a wide range of maintenance related correspondence courses. Commodity managers are strongly encouraged to coordinate with MMOs and S-3s to determine the content and availability of such courses for unit maintenance

personnel. MMOs will pay close attention to the series of maintenance related courses developed and offered by MCI. Group enrollment is strongly encouraged for those MCI courses related to the maintenance management functional areas.

#### 4004. TECHNICAL TRAINING

1. Technical training (skill-progression MOS training) is required for all technicians and maintenance supervisors, and will provide the level of instruction necessary to perform maintenance duties commensurate with rank and MOS. Schedule and conduct specific technical training classes when new types of equipment are introduced or new maintenance personnel are introduced to unit equipment.
2. Conduct periodic testing of technician knowledge upon completion of technical training using the MOS manual as a guide. Conduct refresher training for noted deficiencies. Schedule and conduct specific classes regarding the use and maintenance of all support and test equipment, e.g., use and care of tools, use and care of TMDE, etc.
3. Maintenance Supervisor Training. The objective of maintenance supervisor training is to develop in supervisory personnel a working knowledge of those maintenance management and operator training topics (as appropriate) presented in MCO P4790.2\_. This enables supervisors to implement, direct, control, and review maintenance programs within their area of responsibility.

#### 4005. CROSS TRAINING

1. While the cross training of maintenance personnel is not directed by this headquarters, it is encouraged as a management tool to be used at the organizational level to assist in the overall maintenance efforts.
2. Cross training provides the shop/maintenance officer with increased flexibility in maintenance operations.
3. When cross training is used, MMOs will ensure that:
  - a. Cross training is normally confined to personnel within the same or related occupational fields.

b. Accomplish cross training of personnel from different occupational fields only to fill valid requirements.

c. Use cross training of personnel effectively within the organizational maintenance program.

d. Maintenance shops keep a record of all unit personnel who have been cross trained.

#### 4006. TRAINING RECORDS

1. Training records provide the manager with the means to administer the unit/shop level training program. Without such records, the training program may suffer from an inadvertent omission of necessary training.

2. Maintenance managers will keep the following training records, if applicable, for technical training, which falls under their review:

a. Annual Training Plans. Annual training plans contain information on training planned for the upcoming calendar year. Conduct a thorough review of the unit's maintenance training posture to determine what specific training areas will receive emphasis during the upcoming year. Compile this information and incorporate it into the annual training plan.

b. Quarterly Training Directives. The quarterly training directive delineates, specifically, what classes will be conducted during the quarter. It may or may not schedule classes specifically as to time and place, at the unit's option, but should delineate, at a minimum, what training will be conducted.

c. Monthly/Weekly Training Bulletins. Monthly/weekly training bulletins will specify where a period of instruction will take place, who will deliver the period of instruction, who will attend, and when the period of instruction will take place. The MMO will ensure that qualified instructors are assigned.

d. Attendance Roster. Maintain attendance rosters for each period of instruction held. Figure 4-2 is the recommended format for attendance rosters.



e. Course Critique. Periodic evaluations of maintenance training will be conducted. The sponsor of the training will maintain records of evaluations. Figure 4-3 is the recommended format for course critiques.

f. Lesson Plans. The sponsor of the training provided will maintain a file of lesson plans if the lesson plans are to be reused. If lesson plans are used more than once, the lesson plans will be reviewed prior to reuse and certified as current, or revised prior to the conduct of training. Figures 4-4 and 4-5 are the recommended format and essential data for lesson plans.

SOP FOR MAINTENANCE MANAGEMENT

UNIT HEADING

4790  
CODE  
DATE

From: Commanding Officer, \_\_\_\_\_  
To: Commanding General, 4th Force Service Support Group (G-3)  
Via: Commanding General, Marine Forces Reserves (G-4/MMO)

Subj: INTERMEDIATE MAINTENANCE ACTIVITY (IMA) TRAINING SUPPORT

Ref: (a) ForO P4790.3A

1. In accordance with the reference, request IMA conduct the following training:

<u>TYPE OF TRAINING</u>	<u># INSTRUCTORS</u>	<u>DATE</u>	<u>TIMES</u>
REPAIRABLE ITEM PROGRAM	1	21 NOV 01	1000-1100
EQUIPMENT INDUCTION	1	21 NOV 01	1100-1200

I.M. COMMANDING

NOTE 1: Forward this request at least 30 days prior to class.

NOTE 2: Type of training will be explicit enough for the instructor to develop the right type of lesson plan to cover the type of instruction required requested.

Figure 4-1.--Sample Format of a Letter Requesting IMA Training Support.

# SOP FOR MAINTENANCE MANAGEMENT

## CLASS ATTENDANCE ROSTER

COURSE TITLE _____				INSTRUCTOR _____			
LOCATION/UNIT _____ / _____				DATE _____			

LAST NAME	FIRST INITIAL	SECTION/ BILLET	MOS/ RANK	LAST NAME	FIRST INITIAL	SECTION/ BILLET	MOS/ RANK
1.	_____	_____	_____	19.	_____	_____	_____
2.	_____	_____	_____	20.	_____	_____	_____
3.	_____	_____	_____	21.	_____	_____	_____
4.	_____	_____	_____	22.	_____	_____	_____
5.	_____	_____	_____	23.	_____	_____	_____
6.	_____	_____	_____	24.	_____	_____	_____
7.	_____	_____	_____	25.	_____	_____	_____
8.	_____	_____	_____	26.	_____	_____	_____
9.	_____	_____	_____	27.	_____	_____	_____
10.	_____	_____	_____	28.	_____	_____	_____
11.	_____	_____	_____	29.	_____	_____	_____
12.	_____	_____	_____	30.	_____	_____	_____
13.	_____	_____	_____	31.	_____	_____	_____
14.	_____	_____	_____	32.	_____	_____	_____
15.	_____	_____	_____	33.	_____	_____	_____
16.	_____	_____	_____	34.	_____	_____	_____
17.	_____	_____	_____	35.	_____	_____	_____
18.	_____	_____	_____	36.	_____	_____	_____

Figure 4-2.--Sample Format of a Class Attendance Roster.

## SOP FOR MAINTENANCE MANAGEMENT

### COURSE CRITIQUE

COURSE TITLE \_\_\_\_\_ INSTRUCTOR \_\_\_\_\_  
DATE \_\_\_\_\_ TIME \_\_\_\_\_ REVIEWER \_\_\_\_\_

1. Did the instructor present the learning objectives prior to the class?  
YES NO
2. Was the period of instruction presented in a manner, which was easy to follow?  
YES NO
3. Were training aids used?  
YES NO
4. Did the instructor provide detailed answers to questions?  
YES NO
5. General comments.

Figure 4-3.--Sample Format of a Course Critique.

## SOP FOR MAINTENANCE MANAGEMENT

### CLASS TITLE

### LESSON PLAN

A.	INTRODUCTION	(2) MINUTES
	1. GAIN ATTENTION:	
	2. MOTIVATE:	
B.	PURPOSE AND MAIN IDEAS:	(2) MINUTES
C.	TRANSITION:	(1) MINUTE
D.	BODY	(40) MINUTES
E.	QUESTION & ANSWER PERIOD	(5) MINUTES
F.	SUMMARY & REVIEW	(5) MINUTES
G.	CLOSING STATEMENT	(2) MINUTES

Figure 4-4.--Sample Format of a Lesson Plan.

## SOP FOR MAINTENANCE MANAGEMENT

### ESSENTIAL DATA SHEET

<u>SUBJECT</u>	<u>CLASS TITLE</u>
DATE PREPARED	19 August 2001
CLASS ROOM REQUIREMENTS	Chalkboard  Seating for twenty Good lighting  Electricity
STUDENT REQUIREMENTS	Paper  Student Outlines  TM 4700-15/1_
REFERENCES	MCO P4790.2_  TM 4700-15/1_  UM 4790-5
PURPOSE AND MAIN IDEAS	The purpose of this period of instruction is to enable each student to review and submit PQDR's and records per requirements outlined in Chapter 4.

Figure 4-5.--Sample Format of an Essential Data Sheet.

# SOP FOR MAINTENANCE MANAGEMENT

## CHAPTER 5

### INSPECTIONS/VISITS/QUALITY CONTROL

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## SOP FOR MAINTENANCE MANAGEMENT

### CHAPTER 5

#### INSPECTIONS/VISITS/QUALITY CONTROL

##### 5000. GENERAL INFORMATION

1. A commander has a need for personal observation of the maintenance status and operating procedures, which supplement the reports received on equipment operations. Equipment and maintenance management inspections are instruments by which a commander may ascertain equipment status and ensure effective maintenance procedures are being followed.
2. Maintenance inspections are conducted in the form of staff visits, technical inspections, and command inspections. These inspections are conducted by the unit commander, the commander's staff, or by higher headquarters. Inspections may be conducted by various methods and for a variety of reasons. The command will determine the type inspection used based on the inspection objective. MCO P4790.2\_ contains maintenance inspection requirements.
3. Inspections and visits are the principal means available to unit commanders to determine whether their planning and organization are sound, their staffs functioning effectively, and their directives are clear, well understood, and implemented by subordinates. Inspections and visits enable unit commanders to evaluate their units' effectiveness in the use of maintenance resources. Inspections and visits are subdivided into formal inspections, informal inspections, and Field Supply and Maintenance Analysis Office (FSMAO) analyses.

##### 5001. FORMAL INSPECTIONS

1. The Commanding General's Inspection (CGI) program requirements for oversight of maintenance management are fulfilled via the FSMAO Program; paragraph 5003 refers.
2. MCO P4790.2\_ requires unit commanders to conduct inspections of their units to ensure combat readiness. Units will develop their own internal checklists; however, use of the current MARFORRES or FSMAO checklists is recommended.



5002. INFORMAL INSPECTIONS

1. General. Use informal inspections to obtain first-hand information about a unit and its operating procedures. Visits may be conducted in a formal manner, in which case they take on the aspects of a formal inspection; or they may be conducted in an informal manner, which stresses the exchange of information and ideas.
2. MMO Inspections. Each unit will conduct an internal maintenance management inspection at least annually, scheduled in conjunction with the unit's S-3. Document and retain results on file for two-years.
3. Limited Technical Inspections. There are two MARCORLOGBASE technical assist visit (TAV) teams chartered to provide customer directed, 2d through 4th echelon, logistics-related analysis and maintenance assistance to predetermined Reserve units to enhance readiness. At least every twelve months these TAV teams will assist pre-determined MARFORRES units with the following:
  - a. Limited Technical Inspections (LTIs) on site Commander specified percentages of equipment (to include verification of modification).
  - b. Assessments of maintenance-related programs to include training when coordinated between the site commander and the TAV Commodity Manager.
  - c. Corrosion-degradation levels on ground equipment.
  - d. Quarterly trend-analysis data overview by commodity area to MARFORRES.
  - e. Quantification of on-hand MARES-reportable items.
4. MARFORRES, MSCs, and units will maintain TAV reports on file for two years.

5003. FSMAO ANALYSIS VISITS

1. FSMAO visits are established to provide the Commandant of the Marine Corps with direct field representation at the unit level by analyzing the effectiveness of supply and maintenance management procedures. The purpose of FSMAO is threefold:

- a. Analyze the effectiveness of unit supply and maintenance procedures.
  - b. Determine the efficiency of the units being analyzed.
  - c. Furnish assistance and guidance in supply and maintenance operations and procedures.
2. Analysis visits are announced at the beginning of each fiscal year (FY). Analysis visits are divided into two major areas: supply and maintenance management. Analysis visits will normally be one to two weeks in duration.
3. Upon completion of the analysis visit, FSMAO prepares two written reports, the resume and the final report. The resume is a detailed checklist, which provides comments on all discrepancies noted during the analysis. The resume provides an excellent checklist for monitoring progress on corrective actions for noted discrepancies. Separate resumes are provided for supply and maintenance management operations. Approximately 30 days after the analysis visit, FSMAO submits a formal written report, containing significant findings and recommendations. The report is provided to the MARFORRES (G-4, Supply/MMO) via the chain of command.
- a. Forwarding Reports.
    - (1) Following an analysis, FSMAO provides the original and two copies of the analysis report to the unit. The unit will endorse the report and forward it to this headquarters via the chain of command. Units will retain the maintenance/supply resumes as a working checklist between each analysis.
    - (2) Via addressees should review FSMAO reports, take appropriate action, and endorse the report with comments. Place a copy of the forwarding endorsement on each remaining copy of the FSMAO report. Each endorsing headquarters provides a copy of their endorsement to each previous endorser and to the originating FSMAO.
  - b. Time frames. The unit receiving the analysis will forward its endorsement via the chain of command no later than 30 days after the date of the analysis report. Headquarters in the chain of command are allowed 15 days to prepare and forward subsequent endorsements.
  - c. Formats. MCO P4400.160\_ contains analysis report endorsement formats.

5004. FORMAL INSPECTION REPORTS

1. Oral Reports. The inspection team from this headquarters will provide oral critiques to unit commanders covering all discrepancies noted during formal inspections. Critiques will be detailed in nature, and provide for immediate resolution of findings.
2. Written Reports. Inspection reports will be prepared by all maintenance management and commodity area inspectors for all inspections conducted by this headquarters. In addition to the completed checklists, inspection reports will include comments and recommended corrective actions for noted discrepancies. Inspection reports will not cite discrepancies not briefed during post inspection oral critiques.
3. Review. Inspection reports prepared by this headquarters will be reviewed, consolidated, analyzed, and maintained by MARFORRES Staff Officers. Unit commanders will maintain a file on all maintenance and maintenance management inspections conducted by the unit or higher headquarters.
4. Retention. The unit MMO will maintain maintenance and maintenance management inspection reports prepared by higher headquarters as well as FSMAO reports with endorsements for a minimum of three years or until the next FSMAO.

5005. CORRECTION OF DISCREPANCIES

1. Correct all discrepancies noted during inspections in an expeditious manner. Preparation for future inspections will include special emphasis on previously noted discrepancies to ensure that no "repeat discrepancies" occur.
2. Submit reports of action taken to correct noted discrepancies to this headquarters based on requirements contained in related inspection reports.

5006. QUALITY CONTROL

1. Quality control requires a complete equipment check out to determine proper completion of maintenance actions and that equipment records are completed per TM-4700-15/1.

2. Critical to the effective performance of maintenance is a viable and aggressive quality control program. At a minimum, such programs will ensure the following items are executed:

a. Each commodity will assign, at a minimum, a primary and an alternate Quality Control Inspector. Such assignment will be made in writing.

b. Quality control inspectors will be adequately schooled in their responsibilities and the importance of their position.

c. Quality control inspectors will be certified by the commodity manager semi-annually. Commodity Managers will ensure Quality Control inspectors are performing their duties using the appropriate Technical Manuals.

d. Block 56 of an ERO must be signed by the individual performing the quality control inspection. Units with a single mechanic/technician performing maintenance tasks may sign Block 56 as their own Quality Control inspector.

5007. PRODUCT QUALITY DEFICIENCY REPORT (PQDR). The PQDR is a means of notifying the item manager/manufacturer of deficiencies in materiel, design, or procurement so that action may be initiated to correct the reported deficiency. Submit all product quality deficiencies directly to the PQDR Control Point, Albany, GA per MCO 4855.10, and provide an electronic copy of the PQDR to the MARFORRES MMO.

# SOP FOR MAINTENANCE MANAGEMENT

## CHAPTER 6

### FACILITIES

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# SOP FOR MAINTENANCE MANAGEMENT

## CHAPTER 6

### FACILITIES

#### 6000. ASSIGNMENT AND RESPONSIBILITIES

1. Tactical Considerations. Maintenance area site selection is governed by mission, terrain, size, environment, tactical situation, and associated maintenance requirements. The location of a unit's maintenance facilities is largely determined by the headquarters commander who has the responsibility for the selection of the specific command post site and the allocation of space within it. The MMO will advise the commander and commander's staff on the arrangement of maintenance facilities.
2. Submit requests for the assignment of additional facilities or improvement of assigned facilities to MARFORRES (Base Operation Section, Facilities).

#### 6001. ADMINISTRATIVE STORAGE AND CONTROL

1. Commanders may authorize administrative storage programs (ASP). Unit commanders must request, in writing, authorization from MARFORRES (G-4) to establish an ASP. The request must state why the equipment is to be placed in an ASP, and contain a listing of the type and quantity of equipment to be inducted. Once authorized to establish an ASP, commanders must provide a quarterly report listing the equipment stored by TAMCN, nomenclature, serial number(s), date inducted, and estimated release date. Commanders may induct and release equipment from the ASP without approval with the exception of items to be released prior to 12 months from induction. Items to be released prior to 12 months from induction will require written authorization.

##### a. Storage Timeliness.

(1) Combat and Tactical Vehicles (including towed howitzers). The minimum storage period is 12 months and the maximum storage period is 24 months for all combat and tactical vehicles. The maximum storage period for load lifting equipment is 24 months per MCO P11262.2. Commanders should consider their geographical location and climate conditions when authorizing equipment to be stored outdoors and adjust the storage period to ensure equipment remains in a serviceable condition while in the

ASP. Under no circumstance will the maximum storage period for this equipment category be extended.

(2) All Other Ground Equipment (including trailers). The minimum storage period is 12 months and the maximum storage period is 36 months. MARFORRES (G-4) may grant extensions under the following conditions:

(a) A 12-month extension may be granted (total not to exceed 48 months) for equipment stored indoors.

(b) A 24-month extension may be granted (total not to exceed 60 months) for equipment stored in a controlled dehumidified environment.

(3) Items level A packed may be stored indefinitely unless otherwise advised by the preservation, packaging, and packing (PP&P) facility that preserved the equipment.

b. Before granting extensions, the MSC must conduct an inspection of the ASP to ensure equipment is in a serviceable condition and an extension will not allow the equipment to deteriorate into an unserviceable condition.

(1) Equipment placed in an ASP must:

(a) Be in condition code A or B.

(b) Be exercised per applicable Technical Manual (TM) or Technical Instructions (TI) requirements.

(c) Have an annual PMCS conducted and all CM completed before induction. A copy of the PMCS ERO will be maintained in the equipment record jacket or folder until the equipment is released from the ASP.

(d) Have any due PMCS conducted and new PMCS scheduled upon removal. The PMCS Roster (NAVMC 10561) will be annotated in the remarks section that the equipment is in the ASP.

(e) Be in level A or B preservation per local PP&P facility's guidance.

(2) Inspection of Equipment in the ASP. Preserving items for storage is expensive and time consuming. Once the expense of preserving equipment has been incurred, care should be taken to

prevent recurring preservation cost while conducting inspections. Commanders should include ASP inspection procedures/timelines based on their PP&P facility's recommendations and geographical locations in their MMSOP/MMPN, or their endorsement authorizing an ASP. A thorough inspection of unit ASPs should be conducted during formal inspections and assist visits, such as FSMAO visits. At a minimum, command-authorized ASPs will conduct visual inspections as follows:

- (a) Items stored outdoors, monthly and after severe weather.
- (b) Small arms, monthly during the monthly serialized inventory.
- (c) Items stored indoors, quarterly.
- (d) Items stored in a dehumidified facility, semiannually.

Note: For the purpose of the ASP, "visually inspect" means to visually look at the equipment to ensure the preservation and packing is still serviceable. "Visually inspect" any security measures (such as banding materiel, locks, or serialized tags) to ensure that they have not been tampered with. This does not mean that you have to open containers or boxes packed by the PP&P facility to look at the equipment packed inside. Nor does this mean that you must break preservation seals to inspect inside of vehicles.

(3) Accounting and security guidance for level A packed weapons is contained in OPNAVINST 5530.13\_ and MCO 8300.1\_.

(4) Items preserved by a PP&P facility will have a copy of the packing list, with the date preserved and PP&P facility location attached to the equipment or containers, and a copy on file. Items not preserved by a PP&P facility will have the work performed to preserve the item annotated on an ERO and the ERO will be maintained in the equipment record jacket or folder until the equipment is released from the ASP.

2. Maximum use of T/E equipment will be made in the field environments to ensure adequate covered field storage, i.e., tentage, storage vans, and maintenance vans are available for unit supplies and equipment.



6002

SOP FOR MAINTENANCE MANAGEMENT

6002. GENERAL. Review MCO P4790.2 for additional guidelines concerning the assignment, responsibilities, use, upkeep, and control of maintenance facilities and storage areas.

# SOP FOR MAINTENANCE MANAGEMENT

## CHAPTER 7

### DIRECTIVES AND TECHNICAL PUBLICATIONS

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## SOP FOR MAINTENANCE MANAGEMENT

### CHAPTER 7

#### DIRECTIVES AND TECHNICAL PUBLICATIONS

7000. RESPONSIBILITIES. The commander is responsible for an effective unit maintenance and maintenance management effort, to include a technical publications control system. The S-1/Adjutant with the advice and assistance of the MMO and other functional area managers is responsible for the overall operations of a unit's publications control system. Marine Corps Publications Distribution System (MCPDS) allows the designated user to view the current listing of publications, maintain and manage the Publication Listing (PL), and order publications on-line. CMC (ARD) manages PLs by Individual Activity Codes (IACs). MCO P5600.31\_ outlines the responsibilities for commander's PL management. MCO P4790.2\_ requires the use of a publication control form.

#### 7001. GENERAL INFORMATION

1. One of the essential resources contributing to an effective equipment maintenance program is a complete and up-to-date library of maintenance related and equipment associated publications. Commanders will verify that authorized maintenance related and equipment associated publications are on-hand and that effective internal distribution control procedures are established. Units will maintain sufficient publication on-hand to sustain its operations. Digitized publication obtained from the Internet, CD-ROMS, or other source must be downloaded and maintained on site as either electronic or paper copies. Prompt action is required to increase and/or decrease allowances as requirements change.
2. The term publication as used throughout this manual includes both directives and technical publications. Examples of directives are Marine Corps Orders (MCOs) and Marine Corps Bulletins (MCBuls); examples of technical publications are Technical Manuals (TMs) and Modification Instructions (MIs).
3. Technical publication control is a subset of the unit's entire publication control program. The publications control system is divided into four functions: automatic distribution control, internal distribution control, inventory control, and order control.

7002. TECHNICAL PUBLICATIONS CONTROL

1. It is not possible to separate publications control procedures for technical and non-technical publications. The S-1/Adjutant has staff cognizance over allowances, ordering, and internal distribution for technical and non-technical publications. The unit MMO and maintenance officers will advise the S-1/Adjutant on matters relating to technical publications and will coordinate maintenance section publication requirements.
2. In setting up a technical library, it is necessary to consider both technical and non-technical publications. Libraries should consist of the following: TMs, SLs, lubrication orders /instructions, directives, orders, bulletins, and this manual. Set up a system to support the continuing operation of the technical publications library.
3. MMO and Maintenance Officer Requirements.
  - a. Establish procedures to update/validate the PL to provide for adequate publications. This will be done continuously during the MMOs internal reviews.
  - b. Establish procedures for quarterly validation of on-hand technical publications with the updated Publication Listing Management System (PLMS) as it is received.
  - c. Establish procedures for the semi-annual validation of on-hand directives in the commodity areas using PLMS and higher headquarters checklists.
  - d. Establish procedures to verify publications on-hand and/or on order as being applicable to the types of equipment and EOM authorized by the unit. Maintain MIs for all echelons to verify the application of those required modifications.
  - e. Establish procedures for verifying unit's PL or request for changes to publications shown on the units internal publication control form.
  - f. Establish procedures for the maintenance and updating of publications to include incorporating changes into the basic publications, filing changes, and removing outdated or superseded publications from the files.

4. The publications allowance control function consists of step-by-step procedures, beginning with which and how many publications are required and ending with a PL update. There are three categories of publications. Technical publications which are associated specific items of equipment; technical publications which are not associated with specific items of equipment; and non-technical publications or directives such as orders and bulletins. Take these three categories of publications through the following eight steps that culminate in an updated PL:

a. Step 1 Determine Equipment. Determine what equipment is rated or supported by the shop/office to ascertain what publications are required. Review the unit's T/E, MAL, and any special allowances. Prepare a publication control form for each type of equipment the unit rates. Fill in the section showing the equipment nomenclature, item designator (ID) number, and TAMCN.

b. Step 2 Determine Publications. Determine what publications are associated with each type of equipment by referring to PLMS. Locate each type of equipment in the PLMS. Record, on the publication control form, all of the publications that are associated with that equipment and within the unit's authorized EOM. The unit's T/O, and any special maintenance authorizations granted by higher headquarters, will indicate the unit's authorized EOM. Ensure that the following are considered when determining publication requirements:

(1) All MIs will be held regardless of the EOM authorized. MIs are required to operate effective modification control and maintenance management programs.

(2) Maintenance support requirements for the T/E and special allowance equipment of all supported units.

(3) Some end items of equipment have components that have publications of their own. The publications for those components are not always listed under their major end item in PLMS. The component, which may be an end item itself, may have to be researched separately.

c. Step 3 Determine Copies. Determine the number of copies needed for each publication. This requires a judgment call based on how many technical libraries are to be maintained and how many copies are needed in each library. Consider these factors in determining quantities:

(1) Number of libraries.

(a) Unit's concept of employment (contained in the unit's T/O).

(b) Contingency plans, deployments, and mobilization.

(c) Shop organization and geographical layout.

(d) Commander's guidance.

(2) Number of copies for each library

(a) Quantity of each type of equipment to be supported by the library.

(b) Number of maintenance/operator teams that may simultaneously require a given publication.

(3) After the quantities have been determined, enter the quantity required per library and the total quantity required in the appropriate columns of the publication control form.

d. Step 4 Determine Publication Control Number (PCN).

Record on the publication control form the PCN for each required publication. For technical publications, check the PCNs for each publication in PLMS. The PCN is normally printed on the signature page and/or on the cover of the Marine Corps technical publications.

e. Step 5 Repeat Steps 1-4 for Other Required Publications.

After completing steps 1-4 on technical publications that are associated with specific equipment items, repeat steps 1-4, as appropriate, as follows:

(1) The determination of requirements for technical publications, not equipment-associated, is not as clear as it is with equipment-associated publications. Publications (not equipment-associated) will not normally be listed under an equipment ID number in PLMS. Some, but not all equipment listings shown in TM-4700-15/1 will be readily identifiable in NAVMC 2761. In many cases, the existence of these publications is made known by references in other Marine Corps directives, inspection reports, personal experience, or a thorough review of PLMS. Determination of the number of copies required, and their PCNs, are accomplished in essentially the same way as described in steps 3 and 4.

(2) The determination of requirements for directives, orders, bulletins, and instructions is also based as a series of judgment calls. The basic criterion for deciding whether or not a publication is required is the answer to the question, "Does this publication contain information that I need to accomplish the mission of my shop/office?" Not all directives are required for every individual shop/office; however, they are well worth reviewing to applicability to unit's maintenance mission. Record directives inventory information on the same publication control form used for technical publications (not equipment-associated).

f. Step 6 Analyze Requirements. Once unit's publications requirements are determined, analyze/refine the requirements for the various PCNs. This analysis will consist of sorting the completed publication control forms in PCN sequence. On a sheet of paper, list the PCNs required and the quantities. Separate lists for each source of publication. Consider the following points during the analysis:

(1) Be alert to duplications because some technical publications will apply to more than one type of equipment. The quantities originally entered may require changes resulting from this analysis.

(2) Sort the cards by PCN to facilitate completion of the next step.

g. Step 7 Consolidate Unit Requirements. Each shop/office should determine its requirements. Consolidate these lists at the unit level in preparation for updating the PL. The S-1/Adjutant and MMO will chair a meeting including all commodity managers. Use the PLMS database or enclosures (1) and (2) to MCO 5600.45 to record the information. Do not accomplish this process by simply adding the requirements of the several commodities/offices and arriving at a figure. This process requires detailed analysis.

h. Step 8 Update the PL. The MMO and S-1/Adjutant can compare the list with the current PL once the consolidation is accomplished and the publication control forms are completed. After the comparison is completed, the S-1/Adjutant prepares the necessary correspondence to update the PL per MCO P5600.31. Prepare correspondence to request changes to the distribution lists of higher headquarters.

7003. AUTOMATIC DISTRIBUTION CONTROL

1. The publication allowance control system for Marine Corps organizations is managed via the individual activity PL. The PL is a listing of all authorized PCNs and automatically distributed from the publications stock control point at Marine Corps Logistics Base, Albany, Georgia to the using unit.
2. The unit S-1/Adjutant, with the advice and assistance of the MMO, is responsible for the maintenance and review of the PL and for verifying that all necessary allowances are established. In some cases, however, publication inadequacies are made worse by irregular and/or improper PL reviews. Left untouched, unit PLs often become outdated due to the revision and realignment of publication codes/lists by Headquarters Marine Corps. An outdated PL will force the unit to go without essential information and could cause receipt of publications that are no longer required. All PCNs will be examined to verify that the adequacy of allowances and quantities. The first 3 digits of a PCN are referred to as a PCN prefix. NAVMC 2761 and PLMS contain a narrative description of PCN prefixes. Authorized PCNs and associated quantities are established/modified at the commander's discretion. Effective PL reviews are time-consuming and require strict attention to detail.
3. The PL will be thoroughly reviewed semi-annually. Use as an effective publication tool, the quarterly review of the PL, along with the receipt of the latest PLMS, to maintain the PL and internal distribution list.
4. Participants in a PL review will include a chairman (usually the Executive Officer), all commodity managers, section heads, and others who receive publications on automatic distribution, e.g., the chaplain and career planner. Beforehand, each section head will have a separate internal review with their section officers/chief and publication's clerk in determining required PCNs and quantity.
5. With the exception of Headquarters Marine Corps initiated PCNs (usually for new equipment publications), commanders will initiate all PL changes. As unit T/Os and T/Es are revised, publication requirements change. If a unit fails to conduct reviews, the PL database will remain essentially unchanged, except for when Headquarters Marine Corps initiate revisions. MCO P5600.31 outlines procedures for submitting PL change requests and can be accessed electronically via MCPDS.



7004. INTERNAL DISTRIBUTION CONTROL

1. The publications internal distribution control system verifies that publications are properly, and automatically routed to those who need them. The internal distribution control system is an S-1 function, assisted by the MMO.
2. PLMS is the key document in the internal distribution control system. PLMS is designed to provide a graphic display of the location of all publications. PLMS also identifies PCNs, corresponding titles, to include associating distribution quantities with specific copy locations.
3. The publication control form should be used as a solid guideline for designation of publication ownership. Large units should use the PLMS database file to facilitate the internal distribution and verify that the required publications are on distribution. Establish procedures to verify that publications received as the result of ordering are not treated the same as publications received on automatic distribution. In the first case, the S-1/Adjutant clerk, will make direct distribution based on copy location information found on the internal distribution control document. The S-1 pubs clerk will send the whole package to the ordering commodity for each publication received in response to an order. The S-1 pubs clerk will use the copy of release/receipt document in the package of publications to close out the order via MCPDS.
4. The most important feature on the publication control form is the "REQUIREMENT/AUTH" column for each line entry. The quantity shown in this column must match the corresponding PCN quantity found on the most current PLs. A mismatch between PLs quantities and the "REQUIREMENT/AUTH" causes confusion regarding how many copies of a specific publication are inbound and to whom they belong.
5. Units with direct access to MCPDS will use the system for publication management per MCO P5600.31\_. Units without direct access to MCPDS will use the PLMS for publication management. PLMS provides access to an automated SL-1-2/1-3 that is updated quarterly and may be access via the Internet at: <http://www.ala.usmc.mil>. The TI-5600 provides a more timely listing of technical publications and may be used to supplement the PLMS between quarterly updates.

6. Units will use the PLMS Publication Data Sheet/Inventory Form as the publication control form required in MCO P4790.2\_. The publication control form used from PLMS and the PLMS users manual will have the following additional instructions:

(1) CMD PL (Command PL) quantity. List the total quantity the unit has on automatic distribution. This field is optional unless used for the entire PL.

(2) UNIT IDL (Unit Internal Distribution List) quantity. List the total quantity that the section has on automatic distribution. This field is optional unless used for the entire IDL.

(3) QTY ON ORDER DOC NUM (Quantity on order and document number). List the number of publications on order in MCPDS and the date ordered. Use of the date is optional when the date is listed on the publications worksheet.

(4) INDIVIDUAL ACTIVITY CODE (IAC). List the units IAC. When the automated system does not provide this information, hand write this information on the publication control form.

(5) DATE. List the date the publication control form is prepared. When the automated system does not provide this information, hand-write this information on the publication control form.

7. Submit a Publication Worksheet to the unit's MCPDS user for any requirement to adjust MCPDS. Figure 7-1 contains a sample Publication Worksheet. Commodity managers will be aware of the internal distribution to properly manage their on-hand publications and to recommend timely changes to update the internal distribution and the PL.

8. Assign only the DCP (S-1) and MMOs office as control points for all publications.

#### 7005. INVENTORY CONTROL

1. The inventory control system deals with the proper maintenance of publication libraries. Well-managed publication inventories complements, well thought out allowance and internal distribution control systems. An effective inventory control system contains two elements: publication conditions and on-hand quantities.

2. Publication conditions relate to the status of directives and manuals on the library shelf. Publications will be up-to-date with all changes properly entered and in a completely readable condition. A positive way of verifying publication conditions is a thorough review of MCPDS, NAVMC 2761, or PLMS.

3. On-hand quantities in each library will match the quantities shown in the Copy Location/Internal Distribution column of the publication control form. When on-hand quantities continually fall short of authorized allowances, the cause may be an ineffective internal distribution control system. Other causes may be poor publication checkout procedures or the absence of locator sheets. MCO P4790.2, contains detailed instructions for using publication inventory control forms and other library management tools.

4. The two inventory methods used are wall-to-wall and update inventories. Conduct wall-to-wall inventories when libraries are in extreme disrepair. Use the update inventories method whenever an updated directive checklist or PLMS is received. An effective inventory control system will preclude any decay of publication libraries.

5. The inventory control function consists of procedures for handling publications once they have arrived at the shop or office. The publications librarian will verify that Marines have up-to-date publications available to them for daily tasks as well as for operations/deployments. Inventory control procedures will address the following facets of library management:

a. Arrange technical publications in the following ways:

(1) By type of publication.

(2) By type of equipment rated or supported.

(3) By a combination of the two.

b. Establish procedures to verify that deployment and/or contingency libraries are identified, documented for embarkation plans, extended shipboard operations, and operations ashore.

c. Establish procedures relative to the publication control form and worksheets which facilitate the management of the inventory control system. At a minimum, maintain a master file

in each shop/office using publication control form or a publication control form list attached to each deployment and/or contingency library.

d. Establish procedures for tracking of publications checked in and out of the library on a daily basis.

e. Provide specific instructions to the various publications librarians on how to enter changes to the different types of publications and how to update records to reflect new publications, new changes, or filled orders.

#### 7006. ORDER CONTROL

1. The order control system consists of procedures designed to certify that publication shortages are properly identified and promptly ordered, and that pending orders are updated in a prompt fashion.

2. The identification of publication shortages is accomplished during a walk to wall or an update inventory. A visual inspection of the "Quantity On-Hand" and "Quantity Required" columns of the PLMS, is a good way to begin the ordering process. The accurate and careful use of a publication library cannot be over emphasized.

3. Once all publication shortages have been identified, place publication shortages on order. Publications clerks must coordinate with the unit S-1/Adjutant who will access the MCPDS PL. The MCPDS PL allows units to: order publications, make and display daily PL adjustments, view their PL to show publications being distributed to the command, view and update mailing addresses. The MCPDS PL will list each publication the unit has placed on order as, processed, backordered, or under revision.

4. Not-In-Stock (NIS) publications via MCPDS will allow the S-1/Adjutant to establish a pending backorder. The S-1/Adjutant will file a copy of this screen message and forward an additional copy to the individual requiring the backorder. Individual publications clerks will take their copies of the Publication Worksheet to the S-1/Adjutant. Together they will reconcile the pending order file to verify that all orders are still required, valid, and that order cancellations and/or rejections are promptly researched and reordered. Carefully managed pending order, validation, and reconciliation procedures will greatly assist the unit in maintaining up-to-date publications libraries.

5. Back-Order-Validation (BOV) of publications via MCPDS is required to be performed quarterly. To perform this validation, units will check their generated publication shortages against the MCPDS BOV. Any shortages not found on the MCPDS BOV will have to be ordered/reordered. There is no value added in validating back-orders more often than quarterly.

7007. INFORMATION SYSTEM FOR PUBLICATIONS FEEDBACK.

Publications play a critical role in achieving system and equipment availability. Report errors/mistakes that are discovered in publications using NAVMC 10772. NAVMC 10772 serves as a medium to accelerate information feedback. MMOs and appropriate commodity/staff officers will maintain file copies of all NAVMC 10772s submitted by subordinates. Complete NAVMC 10772s per TM-4700-15/1 or on-line at <http://www.ala.usmc.mil>.

# SOP FOR MAINTENANCE MANAGEMENT

## PUBLICATION WORKSHEET

From:

To: MCPDS Supervisor

1. Request the following action be taken to the command's publications listing.

PCN

SHORT TITLE

QTY

## ACTION

STATUS

AND

DATE \_\_\_\_\_

2. Point of contact is \_\_\_\_\_, extension \_\_\_\_\_.

SECTION'S OIC/SNCOIC SIGNATURE AND DATE

MCPDS CLERK SIGNATURE

DATE	ACTION COMPLETED
11/1/54	1. Initial investigation of the case.
11/2/54	2. Interview of the complainant.
11/3/54	3. Interview of the witness.
11/4/54	4. Interview of the suspect.
11/5/54	5. Interview of the victim.
11/6/54	6. Interview of the police officer.
11/7/54	7. Interview of the doctor.
11/8/54	8. Interview of the nurse.
11/9/54	9. Interview of the pharmacist.
11/10/54	10. Interview of the judge.
11/11/54	11. Interview of the jury.
11/12/54	12. Interview of the jury.
11/13/54	13. Interview of the jury.
11/14/54	14. Interview of the jury.
11/15/54	15. Interview of the jury.
11/16/54	16. Interview of the jury.
11/17/54	17. Interview of the jury.
11/18/54	18. Interview of the jury.
11/19/54	19. Interview of the jury.
11/20/54	20. Interview of the jury.
11/21/54	21. Interview of the jury.
11/22/54	22. Interview of the jury.
11/23/54	23. Interview of the jury.
11/24/54	24. Interview of the jury.
11/25/54	25. Interview of the jury.
11/26/54	26. Interview of the jury.
11/27/54	27. Interview of the jury.
11/28/54	28. Interview of the jury.
11/29/54	29. Interview of the jury.
11/30/54	30. Interview of the jury.

## LEGEND

ACTION (A) = ADD (D) = DELETE (O) = ORDER (C) = CHANGE

STATUS (BO) = BACKORDER (P) = PROCESS

Figure 7-1.-- Sample Publication Worksheet.

# SOP FOR MAINTENANCE MANAGEMENT

## CHAPTER 8

### MAINTENANCE RELATED PROGRAMS

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## SOP FOR MAINTENANCE MANAGEMENT

### CHAPTER 8

#### MAINTENANCE RELATED PROGRAMS

##### 8000. GENERAL INFORMATION

1. Maintenance related programs sponsored by HQMC and this headquarters are designed to enhance equipment readiness through the application of special procedures. Maintenance related programs are closely related to the maintenance management functional area programs outlined in this manual, and will be given the appropriate emphasis in day-to-day maintenance operations. Generally, maintenance related programs are equally applicable in all commodity areas.
2. Commanders will assign specific responsibility for the control and management of maintenance related programs.

##### 8001. PREVENTIVE MAINTENANCE (PM) STANDDOWN

1. Commanding officers are ultimate responsibility for equipment readiness. The key to a high state of equipment readiness is an aggressive and effective PM program. While in garrison, commanders are encouraged to set aside one day per month for PM or as necessary (depending on equipment density). Commanders will ensure PM periods are identified as part of the training schedule while in a deployed or operational environment.

a. PM periods will contain the following features:

- (1) Command presence.
- (2) Availability of all assigned equipment operators.
- (3) Adequate tools, protective clothing, and supervision for operators.
- (4) Equipment will undergo detailed supervisor inspection procedures at the completion of operator PM.

b. The designation of a PM stand-down provides an excellent means to conduct operator and technician training. Operator training, which normally encompasses proper and safe equipment employment and operation, will include periods of instruction dedicated to developing knowledgeable operator PM.



c. MMOs will coordinate with unit S-3 officers to establish PM time frames and attendance requirements. Personnel will be available to perform the required PM. Do not use maintenance stand-downs for other individual unit training.

#### 8002. TEMPORARY ASSIGNMENT OF HIGHER ECHELON OF MAINTENANCE

1. COMMARFORRES may authorize the temporary assignment of higher echelons of maintenance (EOM) when such assignments provide for the more effective use of available maintenance resources, enhance equipment readiness, reduce excessive backlogs which may exist at the IMA, or result in an overall savings in maintenance costs.

2. Commanders who request a temporary assignment of increased EOM will be guided by the following considerations:

a. Availability of necessary maintenance resources, knowledge, and personnel.

b. The assignment will not interfere with the accomplishment of the regularly assigned echelons of maintenance.

c. Higher echelon maintenance activities cannot perform the required maintenance within acceptable time frames.

3. Forward requests to MARFORRES (G-4/ MMO), via the MMO/LSSO database, or current database, and in accordance with MCO P4790.2\_.

8003. TEMPLOANED/COMMAND ADJUST EQUIPMENT. MARFORRES units are frequently requested to temporarily loan/command adjust equipment to augment other units. Make MIMMS AIS RM4 remarks for temporarily loaned/adjusted equipment per Chapter 9 of this manual.

8004. ADMINISTRATIVE DEADLINE (ADMDL) PROGRAM. Units will use the ADMDL Program as a management tool to conserve resources at the unit level. Commanders may establish an ADMDL program per MCO P4790.2\_.

8005. INSPECT AND REPAIR ONLY AS NECESSARY (IROAN) PROGRAM.

1. IROAN is intended as a cost saving measure. The purpose of IROAN is to extend the service life of equipment. Equipment inducted into IROAN is not subject to a complete rebuild.
2. The MARFORRES G-4 will publish a message announcing the equipment and procedures for processing IROAN candidates. Detailed procedures, to include the authorization and extent of selective interchange of serviceable components, will be included in the message.
3. Equipment nominated for the IROAN program is not exempt from normal required PM/CM services. Commanders will ensure that equipment nominated for the IROAN program is not subjected to neglect, abuse, or cannibalization.
4. The unit MMO, Maintenance Officer, Supply Officer, and commodity managers are responsible for managing the IROAN program.

8006. JOINT OIL ANALYSIS PROGRAM (JOAP)

1. TI 4731-14/1\_ requires Marine Corps units possessing equipment listed in enclosures (1) and (3) of the TI to establish the JOAP as a maintenance related program. The TI provides detailed instructions and procedures for the sampling and processing of oil samples.
2. Forms. The JOAP requires the use of three difference forms, DD Form 2026 (Oil Analysis Request), DA Form 2408-20 (oil Analysis Log), and DA Form 3254-R (Oil Analysis Recommendations and Feedback). All three different forms will be maintained per TM 4700-15/1.
3. Oil samples will be conducted for equipment listed in enclosures (1) through (3) in conjunction with the preventive maintenance checks and services (PMCS).
4. Units will submit oil samples to the JOAP facility as follows:
  - a. MARFORRES units will turn in those samples as required by TI 4731-14/1\_ to the nearest Oil Lab as listed in enclosure (4).

b. Units will appoint a JOAP representative. MCO 4731.1 applies. Desktop procedures will be drafted using MCO P4790.2 as guidance.

c. Establish a JOAP schedule for submitting samples to the lab. Set schedules so that an equal amount of samples are submitted each month. NAVMC 10561s will be used to establish this schedule. Units will not use the same NAVMC 10561 used as a PM schedule. Complete JOAP's NAVMC 10561 as follows:

- (1) Annotate JOAP on the top of the NAVMC 10561.
  - (2) In the Model/USMC No. block, enter the type of equipment and list the items by USMC serial number on subsequent lines. Skip a line between different types of equipment.
  - (3) Enter the calendar year in the year block.
  - (4) Enter the symbol "O", in pencil, in the month the item is to be sampled.
  - (5) When the sample has been completed as scheduled, enter an "X" in ink in the month completed. Do not erase pencil entries.
  - (6) If the sample was completed during a month other than originally scheduled, enter the symbol "X", in ink, for the month the sample was actually completed. Do not erase pencil entries.
  - (7) Enter the reason for delay in completing the sample in the remarks section of NAVMC 10561.
  - (8) Reschedule the next sample, in pencil, once the DD Form 2026 (Oil Analysis Request) is received from the lab.
  - (9) Retain JOAP schedules for a minimum of three years.
5. When the IMA replaces either an engine or transmission, submit a special oil sampling to the local oil lab.
6. If the IMA replaces either an engine or transmission, the DD Form 2408-20 (Oil Analysis Log) will accompany the vehicle to the IMA for turn-in. When the vehicle is picked up from the IMA, units will ensure they receive the DD Form 2408-20 for the engine/transmission replaced.

7. Do not sample equipment while in a storage program. Submit oil samples prior to induction and upon release from storage.
8. Units will not retain oil samples. When samples are received, unit JOAP representatives will mail the samples immediately.
9. Occasionally, the lab will require a resample, with stipulation "do not operate until notified". When this occurs, units will not place the vehicle on combat deadline (CDL). The vehicle will be placed on safety deadline (SDL).

#### 8007. CORROSION, PREVENTION, AND CONTROL (CPAC)

1. Background. The Marine Corps developed a CPAC program in 1992/93 to treat many of the rust problems associated with Desert Shield/Storm and continual exposure of Marine Corps equipment to saltwater and harsh environments. The MARCORLOGBASE is the primary source of repair and expertise for equipment that has been damaged because of rust. In addition to repairing equipment, MARCORLOGBASES also applies undercoating and anti-corrosive coating to equipment to prevent rust from developing. These preventive measures taken by MARCORLOGBASES enhance life expectancy of equipment by six years. Enhancing equipment readiness now will ensure a more capable force for the future. Make the appropriate MIMMS AIS RM4 remarks for CPAC equipment per Chapter 9 of this manual.
2. Responsibilities. Command interest in maintenance and maintenance management is perhaps the single most important factor for a successful maintenance program. Although the corrosion control programs correct many maintenance problems associated with corrosion, and enhances the life expectancy of vehicles, this program in no way eliminates the need for quality 1st and 2d echelon maintenance being performed. In fact, many cases of serious corrosion problems could have been minimized by having a more comprehensive 1st and 2d echelon corrosion prevention and control program.
3. Policy. We will take full advantage of the existing capabilities at the COMMARLOGBASES to correct the increasing problem of rust affecting our tactical fleet of equipment. This command will determine the proportionate share of equipment that each group is to provide and will assign quotas as they become available. Each piece of equipment will have a LTI prior to its induction. All equipment will be inducted combat-ready with no

major subassemblies missing. Equipment will have no leaks greater than Class II, and have no brake or fuel line leaks. Submit all nominations, by serial number, to the MARFORRES (G4/MMO). Commanders will ensure that operational requirements are considered when planning for, and inducting equipment into, CPAC. Commanders will ensure the proper planning and managing of this program, so that changes are not submitted on equipment, and that equipment is turned-in as required.

4. CPAC Funding. MARFORRES annually receives a budget for CPAC efforts. These funds will be used primarily for corrosion prevention efforts vice corrosion repair.

a. The following guidance is provided to ensure requests are qualified for consideration:

(1) Requests for corrosion control tool kits (TAMCN: K7910), wire brushes, sand paper, respirators, dehumidifiers, etc.; as well as paints, primers, or other authorized corrosion control coatings will be given priority.

(2) To limit TOT costs, outsource CPAC work, whenever possible, to a local vendor capable of complying with all Marine Corps CPAC orders and directives, as well as Force Bulletin 4790, which is located in the Lotus Notes Database, or current database, under "Force Directives". Contracts are required if the vendor will be used more than once. If outsourcing is not a viable option, use government approved CPAC facilities such as MCLBS Albany or Barstow, army depots, Army National Guard sites, UNICOR, etc.; excessive TOT costs must be avoided or paid for using other funding sources.

(3) Do not request funds for 5-tons, HMMWV's, or any other equipment that will be replaced within the next year unless it meets the following criteria:

1 The unit expects to retain the equipment in excess of one year.

2 The equipment is critical to the unit's mission.

3 Requires a minimal cost to conduct work.

4 Is not a candidate for T/A reduction.

Examples of good candidates in this category are corrosion repairs to ring mounts on 5-tons or armored HMMWV turrets, routine corrosion control maintenance to these vehicles to prevent further deterioration prior to receiving replacement vehicles, and to correct a safety hazard.

(4) Do not use the funds for cosmetic repairs for the sole purpose of making the item aesthetically pleasing.

b. Submit requests to MARFORRES G-4 via naval message in the following format: TAMCN, nomenclature, category of corrosion (see para c below), qty to be inducted, brief description of work to be performed, name & location of vendor/unit performing the work, estimated cost to complete, TOT costs if required, total cost. Priority will be given to Bravo and Delta TAMCNs that have long been neglected in depot maintenance programs. Again, units are encouraged to outsource CPAC work using local commercial facilities to conduct CPAC/CARC painting in order to reduce costs and time.

c. Corrosion Category Codes are as follows:

(1) Category-A: Painting and undercoating only.

(2) Category-B: Painting, blasting, and undercoating with minor bodywork (e.g., replacement or repair of components such as doors, fenders, or battery boxes due to corrosion.).

(3) Category-C: Includes everything listed in category-B, in addition to component disassembly required to arrest and treat corrosion.

(4) Category-D: Requires depot (5th echelon) maintenance.

d. All requests will be reviewed by the MARFORRES G-4, prioritized, and approved based on the needs of the Force. For units that request CPAC supplies and/or having repairs made organically or using local vendors, funds will be transferred to those units when the supplies are ready to be purchased or the equipment is ready to have the approved work performed. For equipment sent to MCLB Albany or Barstow, funds will be sent directly to those locations upon arrival of the equipment. In order to effectively track all expenditures, distribution of CPAC funds will rest with the MARFORRES G-4 since MARFORRES is required to submit expenditure reports to MARCORMATCOM on a quarterly basis.

8008. LOAD TESTING AND SAFETY INSPECTIONS

1. Perform load testing for all load lifting equipment per MCO P11262.2\_. Maintain load-testing records per TM-4700-15/1\_.
2. Conduct safety inspections of hydraulic jacks and jack stands, MCO P11262.2\_ applies.

8009. REPAIR AND RETURN (R&R)

1. The following procedures are established for all MARFORRES units to follow prior to shipping overflow maintenance/repair and return (R&R) to the supporting maintenance facilities. Procedures that are outlined have been established for two reasons:
  - a. To track program costs.
  - b. To prevent units from using the R&R program as an organizational maintenance program.
2. All requests for R&R funds will be submitted to MARFORRES/G-4/MMO, via electronic mail, prior to being shipped to the supporting maintenance facility. Units will utilize the MMO/LSSO Database, or current database, to request approval. MARFORRES will, in-turn, electronically notify the requesting unit and the appropriate maintenance facility once the request is approved.
3. Organizational units are no longer authorized to send equipment to the depots for overflow maintenance/R&R without first requesting support from 4th Maintenance Battalion. This support may be obtained through equipment evacuation or a maintenance contact team (MCT). If the Maintenance Operation Section (MOS), 4th Maintenance Battalion identifies a need to request maintenance assistance from the depots, that representative will request approval from MARFORRES, via the MMO/LSSO Database, or current database. 4th Maintenance Battalion may authorize the owning unit to submit the request for overflow maintenance. If so, the owning unit will include that representatives name in the "serial review" portion of the request. When requests are approved, the requesting unit and the supporting maintenance facility will be notified via electronic mail.

4. Units are not authorized to ship equipment to any maintenance facility without prior approval. The supporting maintenance facilities will not accept any equipment into their maintenance cycle without proper authorization from MARFORRES.



SOP FOR MAINTENANCE MANAGEMENT

CHAPTER 9

MARINE CORPS AUTOMATED READINESS EVALUATION SYSTEM (MARES)

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## SOP FOR MAINTENANCE MANAGEMENT

### CHAPTER 9

#### MARINE CORPS AUTOMATED READINESS EVALUATION SYSTEM (MARES)

##### 9000. GENERAL

1. MIMMS was developed with the primary objective of increasing equipment readiness with minimum expenditure of cost and effort. MIMMS Automated Information System (AIS) is one of several systems developed to improve and standardize equipment status reporting and management while simultaneously reducing manual reporting requirements.

##### 2. Reporting

a. The primary method of reporting equipment maintenance information is through the Automated Data Processing Equipment (ADPE). UM 4790-5 provides guidance for the use of ADPE.

b. UM 4790-5 provides users with the necessary information to effectively use the system and guidance for the completion of input transactions.

c. The source document for all equipment record keeping procedures is the current edition of TM 4700-15/1\_.

##### 3. RM-4 Remarks

a. In order to standardize the RM-4 remarks within MARFORRES and comply with MCO 3000.11\_, Unit Maintenance Management Officers (MMO)/Maintenance Management Chiefs (MMC) must reconcile, validate, and update the RM-4 remarks on their unit LM2 reports weekly to ensure accurate and timely reporting of MARES equipment deadlines so that unit readiness is displayed accurately at all levels of command.

b. With the limited space available on the LM2 for RM-4 remarks, it is necessary to prioritize the RM-4 Remarks. Therefore, all units will ensure that the following RM-4 remarks are entered in the priority sequence listed below:

- (1) Headquarters Marine Corps (HQMC) Authorized.
- (2) Delta Adjustment (ADJ).
- (3) Command Adjustment (formerly known as site-line).

- (4) Temporary Loan (T/L) of Equipment.
- (5) T/A Deficiencies (DEF).
- (6) T/A Excesses (EXC).
- (7) Marine Air-Ground Task Force (MAGTF) Reporting.
- (8) Planned Allowance (P/ALW).
- (9) Special Allowance (SP/ALW).
- (10) Table of Equipment Allowance File Challenges (T/E-C).
- (11) Equipment in a Not Mission-Capable Supply (NMCS) status in excess of 90-days.
- (12) Equipment in a Not Mission-Capable Maintenance (NMCM) status in excess of 90-days.
- (13) Equipment In-Transit (TRAN) status in excess of 90-days.
- (14) Corrosion Prevention and Control (CPAC).
- (15) Inter-service Support Agreements (ISSA).
- (16) Single-Site Storage for NBCD Equipment.

c. The following paragraphs give examples of each of the RM-4 remarks listed in paragraph 4 above, with an explanation of why and when they are used:

(1) Headquarters Marine Corps (HQMC) Authorized:

(a) This is a required RM-4 remark, and is the first entry made on the LM2:

HQMC AUTH = XXX

(b) Represents HQMC auth T/E qty for a particular TAMCN.

(c) This remark is required for units owning MARES equipment that apply to the unit's Table of Equipment (T/E), regardless of equipment condition, and provides the frame of reference for the total amount of equipment a unit is authorized in its T/E.

(d) The HQMC Auth Qty entered in the RM-4 remark must be taken directly from the MAL.

(2) Delta Adjustment (ADJ):

(a) This is also a required RM-4 remark, and is the second entry made on the LM2:

DELTA ADJ = XXX

(b) The "DELTA" represents the amount of equipment to be sourced upon mobilization and is derived by subtracting the T/A Poss qty from the HQMC Auth qty.

(3) Command Adjustment (formerly known as site-line):

(a) Used to transfer MARES equipment from one command to another (formerly known as lite-line).

(b) The following RM-4 remarks apply for equipment transferred:

1 From the supporting unit (the command adjustment qty to the gaining command as applicable):

CMD ADJ QTY XXX to MXXXXX

2 To the gaining unit (the command adjustment qty from the supporting command as applicable):

CMD ADJ QTY XXX FM MXXXXX

(4) Temporary Loan (T/L) of Equipment:

(a) From the supporting unit:

T/L QTY XXX TO MXXXXX DOR 10MAR01 IAW CG LTR 4TH MAW  
4400/4SUP/1MAR01.

(If a message is used, insert the message info in place of the letter info. For example: CG 4TH MAW 030400ZMAR01.) Note: Do not adjust the AUTH and POSS quantity.

(b) To the gaining unit:

T/L QTY XX FROM MXXXXX DOR 10MAR01 IAW CG LTR 4TH MAW  
4400/SUP/1MAR01.

(If a message is used, insert the message info in place of the letter info. For example: CG 4TH MAW 030400ZMAR01.) Note: Do not adjust the AUTH and POSS quantity.

(5) T/A Deficiencies (DEF):

T/A DEF QTY XXX, DOC# /STATUS/STATUS DATE (JULIAN)/LAST KNOWN  
HOLDER (LKH).

NOTE: A command/unit must have a valid requisition on-hand for all T/E & T/A reportable PEI allowances, unless otherwise directed by higher HQ.

(6) T/A Excesses (EXC):

(a) Upon request for WIR from unit to MARFORRES  
Supply:

EXC QTY XXX, M01139-2075-E010 QTY XXX.

(b) Once disposition instructions have been received, replace the above RM-4 remarks with one of the following:

1 If sent to another unit:

Utilize the CMD ADJ remark per para 3(b).

2 If sent to MCLB Albany/Barstow:

QTY XXX, TO BE SHIPPED TO MCLB ALBANY IAW CG MCLB ALBANY  
050154ZMAR01, ECD.

(c) Once the equipment has been distributed/disposed, remove the RM-4 remark.

(7) Marine Air-Ground Task Force (MAGTF) Reporting:

(a) The unit providing equipment to a MEU/MEB will first make an LM2 asset change transaction reducing both authorized and possessed quantities by a quantity equal to the number of assets provided. Then submit an RM-4 remark citing only the qty of equipment deployed (DPYD) and the Reporting Unit Code (RUC) of the MAGTF unit:

DPYD QTY XXX TO MXXXXX.

(b) The MAGTF unit receiving the equipment will input an LM2 transaction increasing both the authorized and possessed quantities by a quantity equal to the number of assets received, and then submit an RM-4 remark citing only the quantity of equipment received and the RUC of the providing unit:

T/E=XXX, DPYD QTY XXX FR MXXXXX.

(c) Close coordination between the unit providing equipment and the MAGTF unit receiving equipment is paramount to ensure accurate reporting.

(8) Planned Allowance (P/ALW):

(a) P/ALW will only be placed on the LM2 when the unit actually possesses at least one item from the P/ALW.

(b) If all P/ALW items have been received, and are still identified on the EAF as a P/ALW, the unit will request the P/ALW be changed to an actual allowance.

(c) If a P/ALW item is received and is still identified on the EAF as a P/ALW, request a modification of allowance (MOA) from MARFORRES Supply via e-mail.

(d) Increase the auth and poss quantity on the LM2 by the quantity received, "Poss = Auth", and submit the following RM-4 remark:

P/ALW QTY XXX FOR FYXX, QTY XXX RECV AND O/H

(e) Once the planned allowance appears as an actual allowance on the EAF, remove the above RM-4 remark.

## (9) Special Allowance (SP/ALW):

(a) Cite the quantity of equipment authorized and the letter/message authorizing equipment in excess of your unit's T/A to be on hand using the following RM-4 remark:

SP/ALW/QTY XXX/CMC LTR LPP-4/4441/11MAR01.

(b) Once the SP/ALW appears on the T/E, cite the quantity of the SP/ALW and the date of the T/E using the following RM-4 remark:

SP/ALW/QTY XXX/T/E 2MAR01.

(c) Once the SP/ALW becomes part of the unit's T/E, and is no longer reported on the unit's T/E as a SP/ALW, the RM-4 remark must be removed from the LM2.

## (10) Table of Equipment Allowance File Challenges (T/E-C):

(a) When units receive new monthly EAF'S, and a T/E authorized allowance change appears (increases or decreases) for no apparent reason, the owning unit must request a T/E-C to the MARFORRES (G-4/SUPPLY).

(b) Show the EAF challenge quantity and the unit letter in the LM2 using the following RM-4 remark:

T/E-C QTY XXX, MACG-48 LTR 4400/SUP/3MAR01.

(c) Units will not adjust the authorized allowance on the LM2 until they have received a response to their T/E Challenge.

(d) Once a response is received, and the unit has:

1 Won the T/E challenge, the unit must remove the T/E-C RM-4 remark, and will not adjust the auth allow quantity on the LM2.

2 Lost the T/E challenge, the unit must replace the T/E-C RM-4 remark with an appropriate RM-4 remark, if required, and either increase or decrease the authorized quantity on the LM2 as listed on the challenged EAF.

(11) Equipment in a Not Mission-Capable Supply (NMCS) status in excess of 90-days:

(a) An RM-4 remark is required for each PEI on the LM2 in a NMCS (Supply) status over 90 days.

(b) The RM-4 remark will list the serial number of the end item, requisition document number for the critical part only, part status/date, Last Known Holder (LKH), and follow-up action.

(12) Equipment in a Not Mission-Capable Maintenance (NMCM) status in excess of 90-days:

(a) An RM-4 remark is required for each PEI on the LM2 in a NMCM (Maintenance) status over 90 days.

(b) The RM-4 remark will list the serial number of the end item and an explanation for the delay in completing repairs. This entry is required even if the PEI is evacuated to a higher echelon of maintenance.

(c) It is the owning units responsibility to reconcile with the higher echelon of maintenance weekly to determine the correct status of the equipment.

(13) Equipment in an In-Transit (TRANS) status in excess 30-days:

(a) An RM-4 remark is required for each PEI appearing on the LM2 in a TRAN status in excess of 30 days.

(b) This remark will explain the reason for the delay and follow-up action.

(14) Corrosion Prevention and Control Program (CPAC):

(a) Units that evacuate equipment under the CPAC program for work outside a 50-mile radius of the owning unit location will report the equipment as Not Mission-Capable Maintenance (NMCM) regardless of the condition of the equipment. Furthermore, all equipment in Corrosion Category "C" (see para 8007 of this manual), regardless of distance, will be reported as NMCM.



(b) Upon evacuation of the equipment, use the following RM-4 Remark:

CPAC QTY XXX, SERIAL NUMBER, DATE (JULIAN) TO M66666.

(c) Ensure the UIC of "M66666" is used as the holder of the equipment in the RM-4 remark to indentify to all concerned (ALCON) that this equipment is undergoing CPAC repairs.

(15) Inter-Service Support Agreements (ISSA): When an Inter-service Support Agreement (ISSA) is used, an organizational ERO must be opened by the owning unit using job status "38" (Evc-Hech) and a destination account of M66666. In addition, an RM4 remark will be submitted for readiness reportable equipment stating the actual location of the item: "QTY XXX AT MXXXXX/LOCATION".

(16) Single-Site Storage of NBCD Equipment:

(a) Used to transfer NBCD MARES equipment from a command to the MARFORRES Single-Site Storage (SSS) Facility.

(b) The following RM-4 remark applies for NBCD equipment transferred to the SSS:

CMD ADJ QTY XXX to SSS

4. Equipment Repair Order (ERO) Matrix. The Maintenance Management Officer and Maintenance Management Chief (MMO/MMC) are responsible for the apportionment of an ERO Number block within the assigned matrix to his/her subordinate units.

5. Validation Responsibilities. Unit MMOs must ensure accurate and timely reporting of mission essential and readiness reportable equipment deadlines so that unit readiness is displayed accurately at all levels of command. Units will reconcile the LM2 Report weekly with all combat deadlined equipment to ensure:

a. That all combat deadlined equipment has been reported and appears on readiness reports.

b. That equipment removed from combat deadline has been deleted from readiness reports.

c. That T/A allowances are accurately reflected on the unit's LM2.

d. That appropriate RM4 remarks are made in accordance with the current edition of MCO 3000.11 and this manual.

9001. MARINE CORPS READINESS EQUIPMENT MODULE-RESERVE (MCREM-R)

1. MCREM-R is an automated Class II system that was developed by HQMC in order to automate the process of allocating in-stores assets to reserve units. The system applies stores assets to unit wartime requirements until all deficiencies have been filled or available in-stores assets have been allocated. MCREM-R draws SORTS reportable data from several mediums:

a. The MCBul 3000 is the source document for the list of reportable ground equipment.

b. The MARFORRES Loaded Unit Allowance File (LUAF) provides the T/E authorized allowances.

c. The unit LM2 report provides the data for quantity and status of on-hand equipment. This information is drawn from the Headquarters Maintenance Sub-System (HMSS) Files.

d. The quarterly in-stores report used within the principle end item (PEI) stratification provides the status of in-stores Ready-For-Issue (RFI) and Not-Ready-For-Issue (NRFI) equipment located at MARCORLOGBASES (MCLB).

e. Internal MARFORRES excesses. It is important to note that units holding excesses violate MCO 4400.150\_. However, to provide visibility until all excess equipment (internal to MARFORRES) is redistributed, MCREM-R will re-stratify excesses for Status Of Resources and Training System (SORTS) purposes to units with deficiencies.

2. Computations. Reserve SORTS equipment supply and equipment condition readiness computations for PEIs are as follows:

a. EQUIPMENT SUPPLY:

Excess                      (Equipment "On-Hand" plus applied in-stores) - MFR

T/E

## b. EQUIPMENT MAINTENANCE:

(EQUIPMENT "ON-HAND" MINUS DEADLINED) PLUS RFI\*]

(EQUIPMENT "ON-HAND" PLUS APPLIED IN-STORES)

Note: Comply with para 9001.1.e.

3. All MARFORRES SORTS reporting units are required to utilize MCREM-R. Units will incorporate in-stores assets into unit SORTS reporting using the Global On-line Marine Editing and Reporting System (GOMERS) as follows:

a. Reportable Principle End Item (PEI) percentages: MARES reporting units that possess equipment listed in the MCBul 3000, but whose T/E numbers are not listed, will report these percentages.

b. Mission Essential Equipment (MEE) percentages. All units that possess equipment listed in MCBul 3000, and whose T/E is listed, will report those items as MEE (formerly known as pacing) items.

c. If the MEE item percentages of "S" and "R" are lower than the Reportable PEI percentages, the SORTS report will reflect the lower percentages/category rating.

4. LM2 reporting. The LM2 "authorized" and "possessed" columns will still reflect the training allowance (T/A) quantities. MCREM-R will automatically apply/stratify the in-stores for reporting units.

5. MCREM-R data. MCREM-R is provided by HQMC (LPP-1) to MARFORRES (G-4) on Mondays, and the application is distributed three ways:

a. Via E-mail.

b. Via the internet at <http://relm.lmi.org/rem/usmc> (All in lower case. Contact MARFORRES (G-4) MMO/MMC for user and password names.).

c. The MMO/LSSO database, located on the MFRNO3A/MARFORRES server, or current database. To download the applications follow the below directions:

(1) Download and access the database.

(2) Click the MCREM-R option on the website or in the MMO/LSSO database and install the latest MCREM-R update to the "C" drive.

(3) After installation, go to the main menu and enter "L" for unit listing.

(4) Enter "U" for change unit selections. Enter "U" again and input unit UIC, i.e., M00407.

(5) Enter "CTRL-END" to save and exit.

(6) Hit "ESC".

(7) Enter "G" to compute report.

(8) Hit "Enter".

(9) Once in the "Unit Report Menu", enter "3" for "Equipment Status Summary".

(10) The "MCBul 3000 TAMS (Including Stores) Summary" report will provide both the MEE and Reportable PEI/all percentages/numbers for the "S" and the "R".

(11) Hit "ESC" to go back to "Unit Report Menu".

(12) Once in the "Unit Report Menu", enter "4" for "TAMCN Listing".

(13) The "TAMCN Listing" report provides units with information concerning their MCBul 3000 TAMCNs (both Reportable PEIs and MEE). The MEE identification is determined by the placement of a "P" prior to the TAMCN.